



Alert Service Bulletin B787-81205-SB320045-00 LANDING GEAR - Main Landing Gear - Truck Beam and Inner Cylinder Pivot Joint Inspection and Lubrication

Publication:	B787-81205-SB320045-00	Issue 001, 09 Nov 2020
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ECCN: 9E991

The applicability information below is referenced at the lower left of each page to indicate the page applicability. These references are valid for this print copy only.

PM Applicability (Publication Module applicability)

787-8, 787-9, 787-10 Airplanes. Refer to Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 1., Effectivity for the list of affected airplanes.

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Alert Service Bulletin B787-81205-SB320045-00***List of Illustrations***

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

Description**Group 1-2:***Table 1 List of Illustrations - Alert Service Bulletin B787-81205-SB320045-00*

ICN	Used In
ICN-B787-A-000061-A-81205-18107-A-01-1	B787-A-32-00-0045-00A-931C-D Issue 001
ICN-B787-A-000061-A-81205-18108-A-01-1	B787-A-32-00-0045-01A-933B-D Issue 001
ICN-B787-A-000061-A-81205-18109-A-01-1	B787-A-32-00-0045-02A-933B-D Issue 001
ICN-B787-A-000061-A-81205-18110-A-01-1	B787-A-32-00-0045-03A-933B-D Issue 001
ICN-B787-A-000061-A-81205-18111-A-01-1	B787-A-32-00-0045-03A-933B-D Issue 001
ICN-B787-A-000061-A-81205-18112-A-01-1	B787-A-32-00-0045-04A-933B-D Issue 001
ICN-B787-A-000061-A-81205-18113-A-01-1	B787-A-32-00-0045-05A-933B-D Issue 001
ICN-B787-A-000061-A-81205-18114-A-01-1	B787-A-32-00-0045-05A-933B-D Issue 001
ICN-B787-A-000061-A-81205-18115-A-01-1	B787-A-32-00-0045-06A-933B-D Issue 001
ICN-B787-A-000061-A-81205-18116-A-01-1	B787-A-32-00-0045-06A-933B-D Issue 001
ICN-B787-A-000061-A-81205-18117-A-01-1	B787-A-32-00-0045-0AA-931D-D Issue 001
ICN-B787-A-000061-A-81205-18118-A-01-1	B787-A-32-00-0045-0BA-931D-D Issue 001
ICN-B787-A-000061-A-81205-18119-A-01-1	B787-A-32-00-0045-0CA-931D-D Issue 001
ICN-B787-A-000061-A-81205-18120-A-01-1	B787-A-32-00-0045-0CA-931D-D Issue 001
ICN-B787-A-000061-A-81205-18121-A-01-1	B787-A-32-00-0045-0DA-931D-D Issue 001
ICN-B787-A-000061-A-81205-18122-A-01-1	B787-A-32-00-0045-0EA-931D-D Issue 001

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-00A-00AA-D**Issue 001, 09 Nov 2020**

Table 1 List of Illustrations - Alert Service Bulletin B787-81205-SB320045-00

ICN	Used In
ICN-B787-A-000061-A-81205-18123-A-01-1	B787-A-32-00-0045-0EA-931D-D Issue 001
ICN-B787-A-000061-A-81205-18124-A-01-1	B787-A-32-00-0045-0FA-931D-D Issue 001

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Model 787

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End of data module**B787-A-32-00-0045-00A-00AA-D****Issue 001, 09 Nov 2020**

Alert Service Bulletin B787-81205-SB320045-00***List of Effective Data Modules***

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Description**Group 1-2:***Table 1 List of Effective Data Modules - Alert Service Bulletin B787-81205-SB320045-00*

Data Module – Information Name	Issue	Issue Status	Issue Date
B787-A-32-00-0045-00A-00AA-D – List of Illustrations	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-00A-00SA-D – List of Effective Data Modules	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-00A-931C-D – Summary	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-00A-932A-D – PLANNING INFORMATION	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-00A-934A-D – MATERIAL INFORMATION	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-00A-933A-D – ACCOMPLISHMENT INSTRUCTIONS	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-01A-933B-D – Task 1 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION [Group 1-2:]	001	New	2020 12:00:00 AM-11-09

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Model 787

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B787-A-32-00-0045-00A-00SA-D**Issue 001, 09 Nov 2020**

Table 1 List of Effective Data Modules - Alert Service Bulletin B787-81205-SB320045-00

Data Module – Information Name	Issue	Issue Status	Issue Date
B787-A-32-00-0045-02A-933B-D – Task 2 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION [Group 1-2:]	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-03A-933B-D – Task 3 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION [Group 1-2:]	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-04A-933B-D – Task 4 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER LUG BORE INSPECTION [Group 1-2:]	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-05A-933B-D – Task 5 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION [Group 1:]	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-06A-933B-D – Task 6 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION [Group 2:]	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-0AA-931D-D – Appendix A – LOGIC DIAGRAM - LEFT AND RIGHT MAIN LANDING GEAR (MLG) TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION [Group 1-2:]	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-0BA-931D-D – Appendix B – LOGIC DIAGRAM - LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION [Group 1, Configuration 1:]	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-0CA-931D-D – Appendix C – LOGIC DIAGRAM - LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION [Group 1, Configuration 1:]	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-0DA-931D-D – Appendix D – LOGIC DIAGRAM - LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN AND INNER CYLINDER LUG BORE INSPECTION [Group 1, Configuration 2; Group 2:]	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-0EA-931D-D – Appendix E – LOGIC DIAGRAM - LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING AND INNER CYLINDER LUG BORE INSPECTION [Group 1, Configuration 2; Group 2:]	001	New	2020 12:00:00 AM-11-09
B787-A-32-00-0045-0FA-931D-D – Appendix F – PART DEMAND INTENT FORM [Group 1-2:]	001	New	2020 12:00:00 AM-11-09

Applicable To:

Model 787

See Applicability of this data module

End of data module

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Alert Service Bulletin B787-81205-SB320045-00**Summary**

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References

Reference	Title
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 1.B.	Spares Affected
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 8.	Weight and Balance Changes
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 9.	Electrical Load Data
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 11.	Publications Affected
SB B787-A-32-00-0045-00A-934A-D Issue 001, Paragraph 3.A.	Kits/Parts
SB B787-A-32-00-0045-00A-934A-D Issue 001, Paragraph 3.B.	Parts and Materials Supplied by the Operator
SB B787-A-32-00-0045-00A-934A-D Issue 001, Paragraph 6.	Special Tooling Necessary to do this Service Bulletin
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 1.	Effectivity
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 5.	Compliance
SB B787-A-32-00-0045-00A-934A-D Issue 001, Paragraph 2.	Industry Support Information
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 7.	Manpower

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-00A-931C-D**Issue 001, 09 Nov 2020**

Reference	Title
SB B787-A-32-00-0045-00A-934A-D Issue 001, Paragraph 1.	Material - Price and Availability
SB B787-A-32-00-0045-0FA-931D-D Issue 001	Alert Service Bulletin B787-81205-SB320045-00 – Appendix F – PART DEMAND INTENT FORM [Group 1-2:]

Description

Group 1-2:

1. CONCURRENT REQUIREMENTS

None.

2. BACKGROUND

Accomplishment of this service bulletin will detect and prevent heat damage and possible cracks in the Main Landing Gear (MLG) truck beam - inner cylinder pivot pins and inner cylinder bushings. If this service bulletin is not done, the pivot pin could fracture, leading to loss of all or part of the pivot pin assembly and subsequent loss of the MLG truck and loss of directional control during take off or landing.

Fleet sampling inspection of some airplanes found cracks in the left and right MLG Pivot Pins on one of the airplanes. The pins exhibited cracking of the High Velocity Oxygen Fuel (HVOF) tungsten carbide - cobalt - chrome coating. Removal of the outer diameter coating disclosed cracking of the custom 465 CRES substrate. The cause of the cracking was determined to be heat damage due to in-service friction.

This Service Bulletin gives instructions to lubricate and inspect the MLG truck beam pivot pins and inner cylinder bushings, and where necessary to repair and/or replace damaged pivot pins and bushings. The new copper-nickel-tin bushing material provides improved frictional performance.

Boeing Service Related Problem (SRP) 787 SRP-32-0232 is related to this service bulletin.

This table is provided to operators for planning purposes only. Refer to the applicable sections for more information.

Table 1

Planning Data	Affected	Data Module Reference
Spares Affected	Yes	Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 1.B., Spares Affected
AD Related	Yes	Refer to Requirements Bulletin B787-81205-SB320045-00 RB
Weight and Balance Changed	Yes	Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 8., Weight and Balance Changes
Electrical Load Changed	No	Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 9., Electrical Load Data
Publications Affected	Yes	Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 11., Publications Affected

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-00A-931C-D

Issue 001, 09 Nov 2020

Table 1

Planning Data	Affected	Data Module Reference
Airplane Flight Operations Affected (Flight Crew Operations Manual and/or FAA Approved Airplane Flight Manual)	No	Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 11., Publications Affected
Kits/Parts Required	Yes	Data Module SB B787-A-32-00-0045-00A-934A-D, Paragraph 3.A., Kits/Parts
Operator Supplied Parts/Material	Yes	Data Module SB B787-A-32-00-0045-00A-934A-D, Paragraph 3.B., Parts and Materials Supplied by the Operator
Special Tooling Required	Yes	Data Module SB B787-A-32-00-0045-00A-934A-D, Paragraph 6., Special Tooling Necessary to do this Service Bulletin

3. ACTION

(CN-AA80990C)

Get access to the left and right MLG truck beam and inner cylinder joint and lubricate both the left and right Main Landing Gear (MLG) truck beam and inner cylinder pivot joint with MIL-PRF-32014 grease. Do a detailed and Fluorescent Penetrant Inspection (FPI) of the pivot pin OD surface, and do a detailed inspection of the inner cylinder bushing ID surface for heat damage and friction damage. If any heat damage or any friction damage is found, do the applicable on-condition corrective actions.

4. EFFECTIVITY

787-8, 787-9, and 787-10 Airplanes. Refer to Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 1., Effectivity for the list of affected airplanes.

5. COMPLIANCE

Federal Aviation Administration (FAA) will possibly release an Airworthiness Directive related to Requirements Bulletin B787-81205-SB320045-00 RB. The Airworthiness Directive will make the compliance tasks and times given in Requirements Bulletin B787-81205-SB320045-00 RB mandatory

Refer to Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 5., Compliance.

6. INDUSTRY SUPPORT INFORMATION

Boeing warranty remedies are available for airplanes in warranty as of March 14, 2019. Please refer to Data Module SB B787-A-32-00-0045-00A-934A-D, Paragraph 2., Industry Support Information. The warranty remedies will expire eight years from the original release date of this service bulletin.

7. MANPOWER

Refer to Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 7., Manpower.

8. MATERIAL INFORMATION

Boeing Supplied Parts.

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-00A-931C-D

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Refer to Data Module SB B787-A-32-00-0045-00A-934A-D, Paragraph 1., Material - Price and Availability.

Operators are encouraged to complete the survey provided in Data Module Appendix F, SB B787-A-32-00-0045-0FA-931D-D of this service bulletin to help Boeing predict the quantity and timing of the Boeing Supplied Parts.

Applicable To:
Model 787
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B787-A-32-00-0045-00A-931C-D
Issue 001, 09 Nov 2020

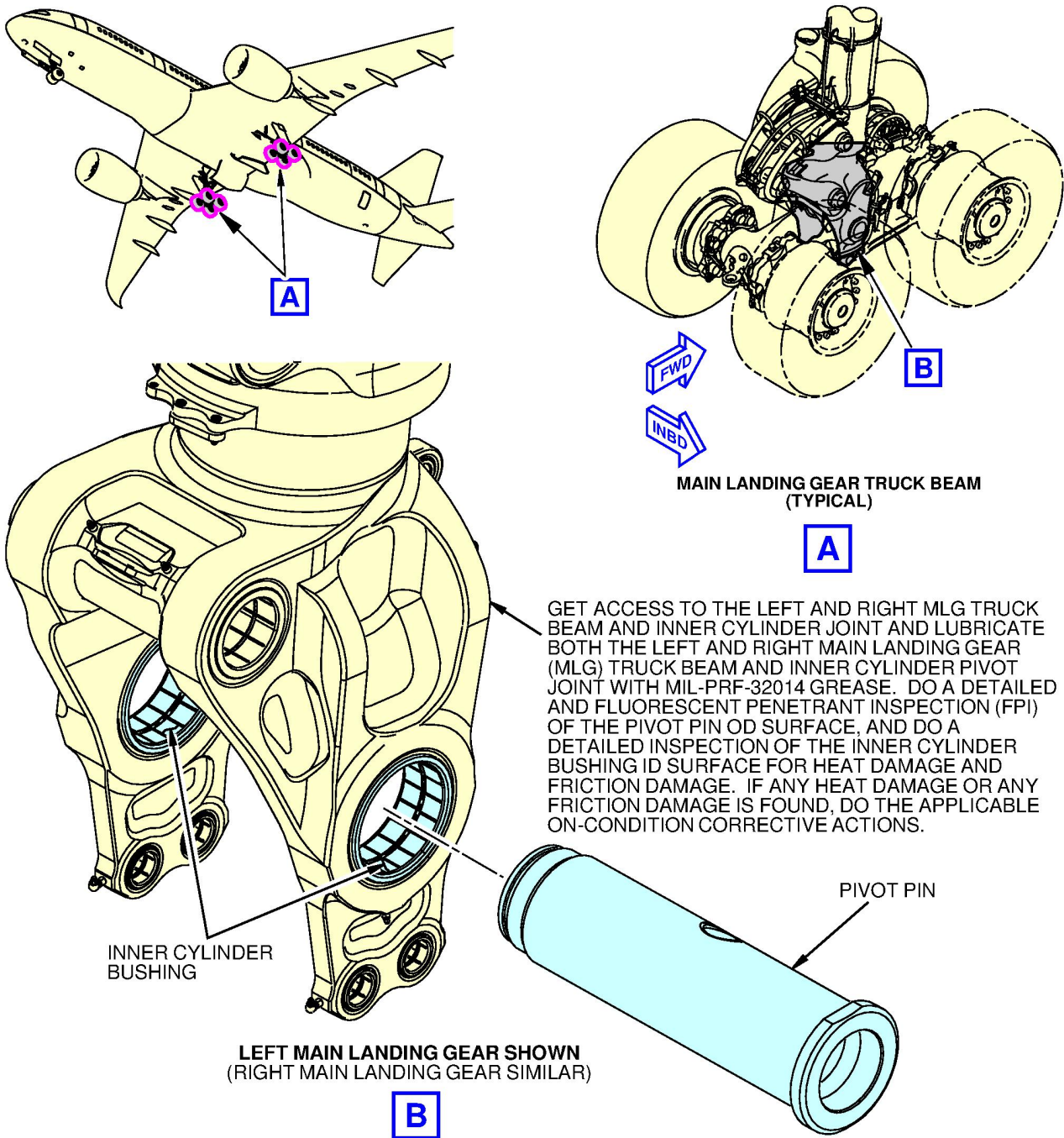


Figure 1 SUMMARY

ICN-B787-A-000061-A-81205-18107-A-01-1

2935312

Applicable To:
Model 787
See Applicability of this data module

End of data module

B787-A-32-00-0045-00A-931C-D
Issue 001, 09 Nov 2020

Alert Service Bulletin B787-81205-SB320045-00**PLANNING INFORMATION**

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References

Reference	Title
SB B787-A-32-00-0045-01A-933B-D Issue 001	Alert Service Bulletin B787-81205-SB320045-00 – Task 1 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION [Group 1-2:]
SB B787-A-32-00-0045-02A-933B-D Issue 001	Alert Service Bulletin B787-81205-SB320045-00 – Task 2 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION [Group 1-2:]
SB B787-A-32-00-0045-03A-933B-D Issue 001	Alert Service Bulletin B787-81205-SB320045-00 – Task 3 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION [Group 1-2:]
SB B787-A-32-00-0045-04A-933B-D Issue 001	Alert Service Bulletin B787-81205-SB320045-00 – Task 4 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER LUG BORE INSPECTION [Group 1-2:]
SB B787-A-32-00-0045-05A-933B-D Issue 001	Alert Service Bulletin B787-81205-SB320045-00 – Task 5 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION [Group 1:]
SB B787-A-32-00-0045-06A-933B-D Issue 001	Alert Service Bulletin B787-81205-SB320045-00 – Task 6 – LEFT AND

Applicable To:

Model 787

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B787-A-32-00-0045-00A-932A-D**Issue 001, 09 Nov 2020**

Reference	Title
	RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION [Group 2:]
SB B787-A-32-00-0045-00A-934A-D Issue 001, Paragraph 3.	Parts Necessary for Each Airplane
SOPM 20-10-07	MACHINING OF TITANIUM
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-50-10	APPLICATION OF STENCILS, INSIGNIA, SILK SCREEN, PART NUMBERING AND IDENTIFICATION MARKINGS
SOPM 20-50-19	GENERAL SEALING
787 AMM 07-11-01	JACKING
787 AMM 12-15-01	MAIN LANDING GEAR SHOCK STRUT MAINTENANCE
787 AMM 12-21-00	LUBRICATION
787 AMM 12-21-14	MAIN LANDING GEAR AND ACTUATING MECHANISM MAINTENANCE
787 AMM 29-11-00	HYDRAULIC SYSTEM
787 AMM 32-00-15	LANDING GEAR DOOR SAFETY
787 AMM 32-00-30	LANDING GEAR DOWNLOCK PINS
787 AMM 32-11-18	MAIN LANDING GEAR TRUCK ASSEMBLY

Description

Group 1-2:

1. Effectivity

A. Airplanes

RC: Start

This bulletin is applicable to 787-8, 787-9, 787-10 Airplane(s), line number(s) 6-1064 in 2 Group(s). Where the effectivity is presented with hyphens between line numbers, the airplane applicability means "through" and "inclusive", e.g. line numbers 1-9 means line numbers 1 through 9 inclusive.

Applicable To:

Model 787

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The Variable Numbers and Group information for the applicable airplanes is given below.

RC: End

An equivalent change is on subsequent production airplanes. Refer to CN-AA80990C for data about this change.

RC: Start

Table 1

GROUP	CONFIGURATION	DESCRIPTION
1	-	787-8 Airplanes delivered with Aluminum-Nickel-Bronze bushings installed.
	1	787-8 Airplanes that have not upgraded to Copper-Nickel-Tin bushings.
	2	787-8 Airplanes that have upgraded to Copper-Nickel-Tin bushings.
2	-	787-9, 787-10 Airplanes delivered with Copper-Nickel-Tin bushings installed.

Airplane Models: 787-10, 787-8, 787-9

Table 2

Variable Number	Group	Variable Number	Group	Variable Number	Group
ZA006	1	ZA430-ZA439	1	ZA740-ZA741	1
ZA100-ZA105	1	ZA445-ZA489	1	ZA768-ZA769	1
ZA116-ZA124	1	ZA506-ZA516	1	ZA778-ZA779	1
ZA135-ZA144	1	ZA536-ZA545	1	ZA783-ZA784	1
ZA152-ZA156	1	ZA560-ZA567	1	ZA817-ZA831	1
ZA175-ZA189	1	ZA576-ZA580	1	ZA839	1
ZA195-ZA204	1	ZA586	1	ZA841-ZA842	1
ZA215-ZA225	1	ZA588-ZA593	1	ZA846-ZA848	1
ZA230-ZA256	1	ZA610-ZA617	1	ZA853-ZA863	1
ZA260-ZA277	1	ZA650-ZA652	1	ZA873-ZA876	1
ZA285-ZA296	1	ZA655-ZA663	1	ZA881-ZA888	1
ZA317-ZA324	1	ZA665-ZA677	1	ZA916-ZA920	1
ZA327	1	ZA680-ZA685	1	ZA949-ZA950	1
ZA334-ZA335	1	ZA695-ZA698	1	ZA954-ZA959	1
ZA341-ZA342	1	ZA715-ZA716	1	ZA963-ZA966	1
ZA380-ZA389	1	ZA718-ZA719	1	ZA968-ZA972	1

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Table 2

Variable Number	Group
ZA990	1
ZB001-ZB012	2
ZB021-ZB043	2
ZB047-ZB061	2
ZB077-ZB081	2
ZB097-ZB121	2
ZB127-ZB136	2
ZB167-ZB191	2
ZB197-ZB198	2
ZB217	2
ZB219-ZB220	2
ZB224-ZB229	2
ZB234-ZB242	2
ZB246-ZB248	2
ZB251-ZB258	2
ZB261-ZB262	2
ZB265-ZB282	2
ZB299	2
ZB302-ZB305	2
ZB332-ZB338	2
ZB362-ZB379	2
ZB407-ZB435	2
ZB446-ZB467	2
ZB536-ZB543	2
ZB545-ZB547	2
ZB558-ZB586	2
ZB603-ZB618	2
ZB646-ZB649	2
ZB656-ZB665	2
ZB676-ZB681	2
ZB688-ZB707	2

Variable Number	Group
ZB733-ZB735	2
ZB738-ZB740	2
ZB742-ZB745	2
ZB749-ZB751	2
ZB753-ZB757	2
ZB763-ZB769	2
ZB771-ZB775	2
ZB778-ZB821	2
ZB828-ZB845	2
ZB858-ZB863	2
ZB874-ZB876	2
ZB887	2
ZB890	2
ZB893-ZB904	2
ZB908-ZB922	2
ZB924	2
ZB926-ZB927	2
ZB934-ZB947	2
ZB967-ZB971	2
ZB977-ZB978	2
ZB980-ZB991	2
ZB993-ZB997	2
ZC001-ZC016	2
ZC036-ZC048	2
ZC061-ZC070	2
ZC101-ZC104	2
ZC116-ZC118	2
ZC126-ZC129	2
ZC151-ZC152	2
ZC155-ZC160	2
ZC211-ZC217	2

Variable Number	Group
ZC221-ZC225	2
ZC236	2
ZD001-ZD009	1
ZD012-ZD019	1
ZE001-ZE008	2
ZE013-ZE014	2
ZE016-ZE017	2
ZE031-ZE032	2
ZE040-ZE045	2
ZE075	2
ZE085-ZE086	2
ZE090-ZE091	2
ZE095-ZE096	2
ZE100	2
ZE105-ZE106	2
ZE110	2
ZE115	2
ZE150	2
ZE165-ZE166	2
ZE170-ZE171	2
ZE195-ZE198	2
ZE220-ZE234	2
ZE270-ZE272	2
ZE310-ZE313	2
ZE340-ZE341	2
ZE350-ZE362	2
ZE375	2
ZE380-ZE381	2
ZE415-ZE418	2
ZE425-ZE426	2
ZE455-ZE456	2

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Table 2

Variable Number	Group
ZE481	2

Variable Number	Group
ZE486-ZE487	2

Variable Number	Group
-	-

RC: End**RC: Start****B. Spares Affected**

Group 1, Configuration 1:

Examine your spares supply for 512Z2001-1, -2, or -3 Inner Cylinder Assemblies. If any of these Inner Cylinder Assemblies are found, remove the Aluminum-Nickel-Bronze Inner Cylinder Bushings 512Z3002-1 and replace with Copper-Nickel-Tin Inner Cylinder Bushings 512Z3002-2. Refer to CMM 32-11-74 as an accepted procedure.

Identify on the part that the change given in this bulletin was done. Use the rubber stamp (Code RO) or ink jet (Code J) method. Refer to SOPM 20-50-10 as an accepted procedure.

Group 1, Configuration 2 and Group 2: None

RC: End**RC: Start****2. Concurrent Requirements**

None.

RC: End**3. Reason**

Accomplishment of this service bulletin will detect and prevent heat damage and possible cracks in the Main Landing Gear (MLG) truck beam - inner cylinder pivot pins and inner cylinder bushings. If this service bulletin is not done, the pivot pin could fracture, leading to loss of all or part of the pivot pin assembly and subsequent loss of the MLG truck and loss of directional control during take off or landing.

Fleet sampling inspection of some airplanes found cracks in the left and right MLG Pivot Pins on one of the airplanes. The pins exhibited cracking of the High Velocity Oxygen Fuel (HVOF) tungsten carbide - cobalt - chrome coating. Removal of the outer diameter coating disclosed cracking of the custom 465 CRES substrate. The cause of the cracking was determined to be heat damage due to in-service friction.

This Service Bulletin gives instructions to lubricate and inspect the MLG truck beam pivot pins and inner cylinder bushings, and where necessary to repair and/or replace damaged pivot pins and bushings. The new copper-nickel-tin bushing material provides improved frictional performance.

Boeing Service Related Problem (SRP) 787 SRP-32-0232 is related to this service bulletin.

4. Description

Get access to the left and right MLG truck beam and inner cylinder joint and lubricate both the left and right Main Landing Gear (MLG) truck beam and inner cylinder pivot joint with MIL-PRF-32014 grease. Do a detailed and Fluorescent Penetrant Inspection (FPI) of the pivot pin OD surface, and do a detailed inspection of the inner cylinder bushing ID surface for heat damage and friction damage. If any heat damage or any friction damage is found, do the applicable on-condition corrective actions.

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The work in this service bulletin is done in the maintenance zone(s) given below.

Group 1:*Table 3*

Affected Maintenance Zones	
Model	Zone
787-8	731, 741

Group 2:*Table 4*

Affected Maintenance Zones	
Model	Zone
787-10, 787-9	731, 741

Group 1-2:**RC: Start****5. Compliance**

The Federal Aviation Administration (FAA) will possibly release an Airworthiness Directive related to Requirements Bulletin B787-81205-SB320045-00 RB. The Airworthiness Directive will make the compliance tasks and times given in Requirements Bulletin B787-81205-SB320045-00 RB mandatory.

Accomplish the required actions, based on applicable conditions in Table 5, Table 6, Table 7, Table 8, and Table 9 in accordance with Accomplishment Instructions.

When more than one OPTION is given for a CONDITION, do only one of the OPTION numbers. When more than one ACTION is given for a CONDITION number or an OPTION number, do all of the ACTION numbers for that CONDITION number or OPTION number.

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B787-A-32-00-0045-00A-932A-D**Issue 001, 09 Nov 2020**

Table 5 LEFT AND RIGHT MAIN LANDING GEAR (MLG) TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes	ACTION 1: Lubricate both the left and right Main Landing Gear (MLG) truck beam and inner cylinder pivot joint with MIL-PRF-32014 grease	Within 120 days after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB	Within 120 days after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	50 flight cycles or 25 days whichever occurs later
	ACTION 2: Review maintenance program documentation to verify that it includes lubrication tasks for the left and right MLG Truck Beam and Inner Cylinder Pivot Joint with MIL-PRF-32014 grease at intervals not to exceed 50 flight cycles or 25 days whichever occurs later.	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205 SB320045-00 RB	Within 24 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	-

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Table 5 LEFT AND RIGHT MAIN LANDING GEAR (MLG) TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
CONDITION 1: MAINTENANCE PROGRAM DOCUMENTATION DOES NOT INCLUDE PIVOT JOINT LUBRICATION WITH MIL-PRF-32014 GREASE AT INTERVALS NOT TO EXCEED 50 FLIGHT CYCLES OR 25 DAYS WHICHEVER OCCURS LATER	Update the maintenance program documentation to incorporate lubrication tasks for the left and right MLG Truck Beam and Inner Cylinder Pivot Joint with MIL-PRF-32014 grease at intervals not to exceed 50 flight cycles or 25 days, whichever occurs later.	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB.	Within 24 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness.	-
CONDITION 2: MAINTENANCE PROGRAM DOCUMENTATION INCLUDES PIVOT JOINT LUBRICATION WITH MIL-PRF-32014 GREASE AT INTERVALS NOT TO EXCEED 50 FLIGHT CYCLES OR 25 DAYS WHICHEVER OCCURS LATER.	No further action required.	-	-	-

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Group 1, Configuration 1:

Table 6 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes	Do a detailed and Fluorescent Penetrant Inspection (FPI) of both the left and right MLG Pivot Pin OD surface for friction and heat damage.	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB	Within 36 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	-
CONDITION 1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE PIVOT PIN OD SURFACE	Repeat the detailed and Fluorescent Penetrant Inspection (FPI) of the Pivot Pin outer diameter (OD) surface for heat and friction damage	-		36 Months *[1]
CONDITION 2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE PIVOT PIN OD SURFACE	Do a detailed and FPI inspection on the inner cylinder lug bore for heat and friction damage	Before further flight		-
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install a new Pivot Pin	Before further flight		-
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage.	-		36 Months *[1]

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Table 6 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs	Before further flight	-
	ACTION 1: Install a new Pivot Pin	Before further flight	-
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage.	-	36 Months *[1]

*[1] Installation of defect-free Pivot Pin and concurrent or prior replacement of Aluminum-Nickel-Bronze inner cylinder bushings with Copper-Nickel-Tin inner cylinder bushings and incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease is terminating action to the repeat inspections for that side of the MLG.

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Group 1, Configuration 1:

Table 7 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes	Do a detailed inspection of both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB	Within 36 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	-
CONDITION 1: NO INNER CYLINDER BUSHING ID EXCESSIVE WEAR, NO CRACK AND NO SMEARING FOUND	ACTION 1: Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear	Before further flight		-
	ACTION 2: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	-		36 Months *[1]
CONDITION 2: ANY INNER CYLINDER BUSHING ID EXCESSIVE WEAR, CRACK OR ANY SMEARING FOUND	Do a detailed FPI inspection of the inner cylinder lug bore for heat and friction damage	Before further flight		-

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Table 7 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1 (OPTION 1): Install new Aluminum-Nickel-Bronze Inner Cylinder Bushing(s)	Before further flight	*[1]*[2]
	ACTION 1 (OPTION 2): Install new Copper-Nickel-Tin Inner Cylinder Bushing(s) *[1]*[2]	Before further flight	-
	OPTION 1 and OPTION 2 (ACTION 2): Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear	Before further flight	-
	OPTION 1 AND OPTION 2 (ACTION 3): Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	-	36 Months *[1]
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs.	Before further flight	-
	ACTION 1: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	-	36 Months *[1]

*[1] Installation of Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease constitutes terminating action to the repeat inspections for that side of the MLG.

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Table 7 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
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*[2] Installation of Copper-Nickel-Tin bushings is one way interchangeable. Aluminum-Nickel-Bronze inner cylinder bushings can no longer be installed for that side of the MLG.

Group 1, Configuration 2; Group 2:

Table 8 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes	Do a detailed and Fluorescent Penetrant Inspection (FPI) of both the left and right MLG Pivot Pin OD surface for friction and heat damage.	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB	Within 72 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	-
CONDITION 1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE PIVOT PIN OD SURFACE	Repeat the detailed and Fluorescent Penetrant Inspection (FPI) of the Pivot Pin outer diameter (OD) surface for heat and friction damage	-		72 Months *[1]
CONDITION 2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE PIVOT PIN OD SURFACE	Do a detailed and FPI inspection on the inner cylinder lug bore for heat and friction damage.	Before further flight		-
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install a new Pivot Pin	Before further flight		-
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage	-		72 Months *[1]

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Table 8 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs	Before further flight	-
	ACTION 1: Install a new Pivot Pin	Before further flight	-
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage		72 Months *[1]

*[1] Installation of defect-free Pivot Pin and Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease is terminating action to the repeat inspections for that side of the MLG.

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Group 1, Configuration 2; Group 2:

Table 9 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes	Do a detailed inspection of both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB	Within 72 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	-
CONDITION 1: NO INNER CYLINDER BUSHING ID EXCESSIVE WEAR, NO CRACK AND NO SMEARING FOUND	ACTION 1: Apply lubrication using MIL-PRF-32014 and make sure lubrication passages are clear.	Before further flight		-
	ACTION 2: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	-		72 Months *[1]
CONDITION 2: ANY INNER CYLINDER BUSHING ID EXCESSIVE WEAR, CRACK OR ANY SMEARING FOUND	Do a detailed and FPI inspection of the inner cylinder lug bore for heat and friction damage.	Before further flight		-

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Table 9 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install new Copper-Nickel-Tin Inner Cylinder Bushing(s)	Before further flight	-
	ACTION 2: apply lubrication using MIL-PRF-32014 and make sure lubrication passages are clear.	Before further flight	-
	ACTION 3: Repeat the detailed inspections for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	-	72 Months *[1]
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs	Before further flight	-
	ACTION 1: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	-	72 Months *[1]

*[1] Installation of Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease constitutes terminating action to the repeat inspections for that side of the MLG.

RC: End

Group 1-2:

6. Approval

This service bulletin was examined by the Boeing Company Organization Designation Authorization(ODA). The changes specified in this service bulletin comply with the applicable regulations and are FAA approved, as well as European Union Aviation Safety Agency (EASA)/Joint Aviation Authorities (JAA) approved for all EASA/JAA approved airplanes listed in the service bulletin effectivity. This service bulletin and its approval

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were based on the airplane in its original Boeing delivery configuration or as modified by other approved Boeing changes.

If an airplane has a non-Boeing modification or repair that affects a component or system also affected by this service bulletin, the operator is responsible for obtaining appropriate regulatory agency approval before incorporating this service bulletin.

7. Manpower

The table below shows an estimate of the task hours necessary to do this inspection and repair for each MLG. This estimate is for direct labor only, done by an experienced crew. Adjust the estimate with operator task hour data if necessary. The estimate does not include lost time. These are some examples of lost time:

- Time to adjust to the workplace
- Time to schedule the work
- Time to inspect the work
- Time to cure the materials
- Time to make the parts
- Time to find the tools

Table 10 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION

Task	Number of Persons	Task Hours	Elapsed Hours
Data Module Task 1, SB B787-A-32-00-0045-01A-933B-D	1	1	1
TOTAL FOR EACH AIRPLANE		1	1

Group 1:

Table 11 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECTION

Task	Number of Persons	Task Hours	Elapsed Hours
Get Access	5	12	2.4
Pivot Pin Removal	4	9	2.25
Data Module Task 2, SB B787-A-32-00-0045-02A-933B-D	1	2	2
Data Module Task 3, SB B787-A-32-00-0045-03A-933B-D	1	2	2

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Table 11 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECTION

Task	Number of Persons	Task Hours	Elapsed Hours
Data Module Task 4, SB B787-A-32-00-0045-04A-933B-D	1	2	2
Data Module Task 5, SB B787-A-32-00-0045-05A-933B-D	1	2.5	2.5
Pivot Pin Installation	4	9	2.25
Close Access	5	12	2.4
TOTAL FOR EACH AIRPLANE		50.5	17.8

Group 2:

Table 12 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECTION

Task	Number of Persons	Task Hours	Elapsed Hours
Get Access	5	12	2.4
Pivot Pin Removal	4	9	2.25
Data Module Task 2, SB B787-A-32-00-0045-02A-933B-D	1	2	2
Data Module Task 3, SB B787-A-32-00-0045-03A-933B-D	1	2	2
Data Module Task 4, SB B787-A-32-00-0045-04A-933B-D	1	2	2
Data Module Task 6, SB B787-A-32-00-0045-06A-933B-D	1	2.5	2.5
Pivot Pin Installation	4	9	2.25

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Table 12 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT
JOINT - INSPECTION

Task	Number of Persons	Task Hours	Elapsed Hours
Close Access	5	12	2.4
TOTAL FOR EACH AIRPLANE		50.5	17.8

Group 1-2:**8. Weight and Balance Changes**

Group 1, Configuration 1: 787-8

Weight and Balance changes affected by incorporation of this service bulletin are dependent on the inspection, number of flight cycles, condition, type, number and location of repairs done on each particular airplane. Weight and Balance are to be calculated by the operator by weighing parts installed or removed. Operators should make necessary revisions to the appropriate weight and balance report..

Group 1, Configuration 2: 787-8

Weight and Balance changes affected by incorporation of this service bulletin are dependent on the inspection, number of flight cycles, condition, type, number and location of repairs done on each particular airplane. Weight and Balance are to be calculated by the operator by weighing parts installed or removed. Operators should make necessary revisions to the appropriate weight and balance report.

Group 2: 787-9

Weight and Balance changes affected by incorporation of this service bulletin are dependent on the inspection, number of flight cycles, condition, type, number and location of repairs done on each particular airplane. Weight and Balance are to be calculated by the operator by weighing parts installed or removed. Operators should make necessary revisions to the appropriate weight and balance report.

Group 2: 787-10

Weight and Balance changes affected by incorporation of this service bulletin are dependent on the inspection, number of flight cycles, condition, type, number and location of repairs done on each particular airplane. Weight and Balance are to be calculated by the operator by weighing parts installed or removed. Operators should make necessary revisions to the appropriate weight and balance report.

9. Electrical Load Data

Not changed.

10. References**A. Existing Data:**

1. Change Notice CN-AA80990C
2. Aircraft Maintenance Manual (AMM) 787 AMM 07-11-01, 787 AMM 12-15-01, 787 AMM 12-21-00, 787 AMM 12-21-14, 787 AMM 29-11-00, 787 AMM 32-00-15, 787 AMM 32-00-30, 787 AMM 32-11-18
3. Boeing Service Related Problem (SRP) 787 SRP-32-0232

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4. Boeing Service Bulletin B787-81205-SB320045-00 RB
5. Component Maintenance Manual (CMM) 787-8 CMM 32-11-74, CMM 32-11-79
6. Component Maintenance Manual (CMM) 787-9 CMM 32-13-06, CMM 32-12-20
7. Component Maintenance Manual (CMM) 787-10 CMM 32-10-37, CMM 32-10-36
8. Standard Overhaul Practices Manual (SOPM) SOPM 20-10-07, SOPM 20-20-02, SOPM 20-30-02, SOPM 20-30-03, SOPM 20-50-03, SOPM 20-50-10, SOPM 20-50-19

B. Data Supplied with this Service Bulletin:

None.

C. Installation Requirement Modules Used in the Preparation of this Service Bulletin:

None.

11. Publications Affected

Table 13

Publication	Chapter-Section
787 Maintenance Planning Data	32-00

Damage Tolerance Based Structural Inspections:

Boeing has evaluated the repairs or changes in this service bulletin for effects on Fatigue Critical Structure (FCS) and for changes to Damage Tolerance Inspections (DTI) required in the Maintenance Program. This service bulletin does not affect FCS, therefore DTIs are not necessary.

12. Interchangeability and Intermixability of Parts

Refer to Data Module SB B787-A-32-00-0045-00A-934A-D, Paragraph 3., Parts Necessary for Each Airplane, for interchangeability and intermixability information.

13. Software Accomplishment Summary

Not Affected.

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End of data module

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Alert Service Bulletin B787-81205-SB320045-00***MATERIAL INFORMATION***

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

Reference	Title
SB B787-A-32-00-0045-0FA-931D-D Issue 001	Alert Service Bulletin B787-81205-SB320045-00 – Appendix F – PART DEMAND INTENT FORM [Group 1-2:]
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 10.	References
SB B787-A-32-00-0045-05A-933B-D Issue 001	Alert Service Bulletin B787-81205-SB320045-00 – Task 5 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION [Group 1:]

Description**Group 1-2:****1. Material - Price and Availability**

Boeing can supply the parts shown in Paragraph 3., Parts Necessary for Each Airplane. Operators are encouraged to share schedule requirements with Boeing for incorporation of the service bulletin. The parts are subject to the terms and conditions of the Boeing standard purchase order acknowledgment. Prices are in United States Dollars. Terms: Net 30 days.

Reference this service bulletin and submit your purchase order by one of these methods:

1. Order on-line via ATA Spec 2000 or The Boeing PART Page
2. Fax to (206) 662-7145

REFER TO THE BOEING PART PAGE ON MYBOEINGFLEET.COM OR CONTACT FIRST RESPONDER AT FR@BOEING.COM FOR THE LATEST REORDER LEAD TIME (ROLT) AND PRICE INFORMATION.

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AIRCRAFT SERVICE BULLETIN

NOTE:

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See title page for details.

Group 1:

Table 1

Part Number	Name	Date	QTY	ROLT as of the Issue 001 date of this Service Bulletin (Calendar Days)	Unit Price as of the Issue 001 date of this Service Bulletin (US Dollars)
512Z3002-2	BUSH - INNER CYLINDER TO BOGIE	October, 20, 2020	224	223	5968.00
	BUSH - INNER CYLINDER TO BOGIE	January, 20, 2021	144	223	5968.00
	BUSH - INNER CYLINDER TO BOGIE	April, 20, 2021	240	223	5968.00
	BUSH - INNER CYLINDER TO BOGIE	July, 20, 2021	240	223	5968.00
	BUSH - INNER CYLINDER TO BOGIE	October, 20, 2021	240	223	5968.00
	BUSH - INNER CYLINDER TO BOGIE	January, 20, 2022	120	223	5968.00
	BUSH - INNER CYLINDER TO BOGIE	April, 20, 2022	120	223	5968.00
	BUSH - INNER CYLINDER TO BOGIE	July, 20, 2022	120	223	5968.00
	BUSH - INNER CYLINDER TO BOGIE	October, 20, 2022	120	223	5968.00
	BUSH - INNER CYLINDER TO BOGIE	January, 20, 2023	264	223	5968.00
	BUSH - INNER CYLINDER TO BOGIE	April, 20, 2023	264	223	5968.00
	BUSH - INNER CYLINDER TO BOGIE	July, 20, 2023	264	223	5968.00

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Table 1

Part Number	Name	Date	QTY	ROLT as of the Issue 001 date of this Service Bulletin (Calendar Days)	Unit Price as of the Issue 001 date of this Service Bulletin (US Dollars)
	BUSH - INNER CYLINDER TO BOGIE	October, 20, 2023	120	223	5968.00
515Z2003-3	PIVOT PIN COMPONENT ASSEMBLY	September, 16, 2020	20	420	97,517.00
512Z5002-1	REPAIR BUSHING, INNER CYLINDER PIVOT	November, 16, 2020	40	*[1]	5968.00
	REPAIR BUSHING, INNER CYLINDER PIVOT	December, 18, 2020	40	*[1]	5968.00

*[1] At the time the bulletin published the data is not available

Group 2:

Table 2

Part Number	Name	Date	QTY	ROLT as of the Issue 001 date of this Service Bulletin (Calendar Days)	Unit Price as of the Issue 001 date of this Service Bulletin (US Dollars)
512Z3002-501	BUSH - INNER CYLINDER TO BOGIE	September, 16, 2020	6	292	5968.00
515Z2003-501	PIVOT PIN COMPONENT ASSEMBLY	September, 16, 2020	8	223	97,517.00
512Z5002-501	REPAIR BUSHING, INNER CYLINDER PIVOT	November, 16, 2020	20	*[1]	5968.00

*[1] At the time the bulletin published the data is not available

Group 1-2:

Operators are encouraged to complete the survey provided in Data Module Appendix F, SB B787-A-32-00-0045-0FA-931D-D of this service bulletin to help Boeing predict the quantity and timing of the Boeing Supplied Parts.

2. Industry Support Information

Boeing warranty remedies are available for 787 airplanes in warranty as of March 14, 2019. Boeing has also elected to provide remedies for airplanes out of warranty as of March 14, 2019. For man-hour reimbursement

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for airplanes in or out of warranty as of that date, send a warranty claim to BCA Contracts - Warranty. The part(s) for airplanes in or out of warranty as of that date will be supplied at no charge. Send a purchase order for the part(s) to Boeing Material Management. Please refer to this service bulletin number and reference the airplane variable numbers in your purchase order. The warranty remedies will expire eight years from the original release date of this service bulletin.

If tooling is required to accomplish this service bulletin for airplanes in or out of warranty Boeing will loan the required tooling at no charge.

3. Parts Necessary for Each Airplane

A. Kits/Parts:

To get the end item parts shown below, refer to Paragraph 1., Material - Price and Availability.

NOTE: The parts shown in Paragraph 3.B., Parts and Materials Supplied by the Operator, are necessary for each main landing gear.

Group 1:

Table 3

Part Number	QTY	Name	Existing Part Number	Notes
515Z2003-()	*[1]	PIVOT PIN COMPONENT ASSEMBLY	515Z2003-1, or -2, or -3	*[2]
512Z3002-2	*[1]	BUSH - INNER CYLINDER TO BOGIE	512Z3002-1, or -2	*[2]*[3]*[4]

*[1] Total quantity of parts required depends on inspection results.

*[2] See the Qualified Products List at the end of the Boeing Material Specification (BMS) for supplier data.

*[3] 512Z5002-1 Oversize Bushing may be required. Refer to 787-8 CMM 32-11-74.

*[4] Usage of Aluminum-Nickel-Bronze bushing on airplanes LN 1065 and on is not permitted.

Group 2:

Table 4

Part Number	QTY	Name	Existing Part Number	Notes
515Z2003-()	*[1]	PIVOT PIN COMPONENT ASSEMBLY	515Z2003-501	*[2]
512Z3002-501	*[1]	BUSH - INNER CYLINDER TO BOGIE	512Z3002-501	*[2]*[3]

*[1] Total quantity of parts required depends on inspection results.

*[2] See the Qualified Products List at the end of the Boeing Material Specification (BMS) for supplier data.

*[3] 512Z5002-501 Oversize Bushing may be required. Refer to 787-9 CMM 32-13-06, 787-10 CMM 32-10-37.

Group 1-2:

B. Parts and Materials Supplied by the Operator:

The following parts or materials are necessary to do the change in this service bulletin. Parts and materials in the manuals given in Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 10., Refer-

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ences, can also be necessary. Examine operator part and material supply to make sure all necessary parts and materials are available.

Table 5

Part Number / Specification	QTY	Name	Notes
BMS3-38	1 pint	CORROSION INHIBITING MATERIAL, NON-DRYING PASTE	*[1]*[2]
BMS3-33	1 pint	GREASE, AIRCRAFT, GENERAL PURPOSE	*[1]*[2]
BMS5-142, Type 2	1 pint	LOW DENSITY SEALANT	*[1]*[2]
BMS10-11, Type 1	1 pint	PRIMER	*[1]*[3]*[2]
MIL-PRF-32014	1 pint	GREASE - AIRCRAFT AND INSTRUMENT	*[1]*[2]
MS20995C32	2	LOCKWIRE	*[1]*[2]
MS20995C47	6	LOCKWIRE	*[1]*[2]

*[1] See the Qualified Products List at the end of the Boeing Material Specification (BMS) for supplier data.

*[2] May be purchased from: Boeing Distribution Incorporated (Cage 22819) 2750 Regent Boulevard, Dallas, Texas 75261 Website: <https://shop.boeing.com/aviation-supply>.

*[3] Some primers contain Strontium Chromate and will not be available in the European Union after January 2019 without an authorization. EU operators are encouraged to ensure their suppliers are authorized to provide the material after the sunset date and that downstream users comply with the risk mitigation measures and operational conditions.

C. Parts Modified and Reidentified:

Refer to Data Module Task 5, SB B787-A-32-00-0045-05A-933B-D.

D. Parts Removed and Not Replaced:

None.

4. Parts Necessary to Change Spares

None.

5. Special Tooling - Price and Availability

Boeing can supply the tool(s) shown in Paragraph 6., Special Tooling Necessary to do this Service Bulletin. Operators are encouraged to share schedule requirements with Boeing for incorporation of the service bulletin by e-mail to ServiceBulletinRentalLoanTools@boeing.com. The tool(s) are subject to the terms and conditions of the Boeing standard purchase order acknowledgement. Prices are in United States Dollars. Terms: Net 30 days.

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Reference this service bulletin number and submit purchase order by one of the methods:

1. Order on-line via ATA Spec 2000 or Boeing Part Page

2. Fax to (206) 662-8237

Rental Data:

Table 6

Tool Kit Number	Name	Date	QTY	ROLT as of the Issue 001 date of this Service Bulletin (Calendar Days)	Daily Price as of the Original Issue 001 date of this Service Bulletin (US Dollars)
MIT955Z1011MLG	MISCELLANEOUS TOOL-BUSHING REMOVAL/RE-PLACE/HONING, MLG INNER CYLINDER FORK	October 14, 2020	3	247	63,285.00

6. Special Tooling Necessary to do this Service Bulletin

To get the tools shown below, refer to Paragraph 5., Special Tooling - Price and Availability. Maintenance and overhaul tools in the manuals given in Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 10., References, can also be necessary. Examine operator tool supply to make sure all necessary tools are available.

Table 7

Tool Kit Number	Name
MIT955Z1011MLG	MISCELLANEOUS TOOL-BUSHING REMOVAL/RE-PLACE/HONING, MLG INNER CYLINDER FORK

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Alert Service Bulletin B787-81205-SB320045-00**ACCOMPLISHMENT INSTRUCTIONS**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

Reference	Title
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 10.	References
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 5.	Compliance
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-10-07	MACHINING OF TITANIUM
SOPM 20-50-19	GENERAL SEALING
SOPM 20-50-10	APPLICATION OF STENCILS, INSIGNIA, SILK SCREEN, PART NUMBERING AND IDENTIFICATION MARKINGS
787 AMM 32-00-30	LANDING GEAR DOWNLOCK PINS
787 AMM 32-00-15	LANDING GEAR DOOR SAFETY
787 AMM 29-11-00	HYDRAULIC SYSTEM
787 AMM 32-11-18	MAIN LANDING GEAR TRUCK ASSEMBLY
787 AMM 07-11-01	JACKING
787 AMM 12-21-14	MAIN LANDING GEAR AND ACTUATING MECHANISM MAINTENANCE

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Reference	Title
787 AMM 12-21-00	LUBRICATION
787 AMM 12-15-01	MAIN LANDING GEAR SHOCK STRUT MAINTENANCE

Procedure

Group 1-2:

1. GENERAL INFORMATION



KEEP THE WORK AREA, WIRES AND ELECTRICAL BUNDLES CLEAN OF METAL PARTICLES OR CONTAMINATION WHEN YOU USE TOOLS. UNWANTED MATERIAL, METAL PARTICLES OR CONTAMINATION CAUGHT IN WIRE BUNDLES CAN CAUSE DAMAGE TO THE BUNDLES. DAMAGED WIRE BUNDLES CAN CAUSE SPARKS OR OTHER ELECTRICAL DAMAGE.

NOTE: **RC: Start**

1. This is an Enhanced Required for Compliance document. There will be a separate Service Bulletin (SB) and a separate Requirements Bulletin (RB). If an RB is mandated by an Airworthiness Directive (AD), then all applicable requirements specified in the RB must be done. For the related SB, some locations are marked RC Start and RC End to identify the requirements that are restated from the RB. For the related SB, the areas between RC Start and RC End, including sub-steps and any figures identified between RC Start and RC End, must be done to comply with the AD. Therefore, an Alternative Method of Compliance (AMOC) is required for any deviations to steps between RC Start and RC End, including substeps and identified figures. For the related SB, the steps not between RC Start and RC End may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC; this is provided that the steps between RC Start and RC End, including sub-steps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition. Figures not required for compliance are omitted from the RB.
2. This is an Enhanced Required for Compliance document. The Boeing processes used to create the Service Bulletin (SB) and the Requirements Bulletin (RB) ensure that the information between "RC Start" and "RC End" in the SB are identical to the information in the same sections (Compliance, Work Instructions...) of the RB which the SB refers to as the related document.
3. These work instructions refer to procedures included in other Boeing documents. When the words "refer to" are used and the operator has an accepted alternative procedure, the accepted alternative procedure can be used. When the words "in accordance with" are included in the instruction, the procedure in the Boeing document must be used.
4. The compliance times for the actions in Work Instructions are in the Compliance section.
5. When more than one OPTION is given for a CONDITION, do only one of the OPTION numbers. When more than one ACTION is given for a CONDITION number or an OPTION number, do all of the ACTION numbers for that CONDITION number or OPTION number.

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6. The instructions in Work Instructions and the Tasks can include operation of tools or test equipment. Boeing Engineering Tool Drawings, the Illustrated Tool and Equipment Manual, and the Special Tool and Ground Handling Drawing Index contain data on versions of the tools or test equipment that you can use. It is permitted to use replaced tools. It is not permitted to use superseded tools.
7. A Detailed Inspection is defined as: An intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. This could include tactile assessment in which a component or assembly can be checked for tightness/security. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors and magnifying lenses may be necessary. Surface cleaning and elaborate access procedures may be required.
8. Heat damage is defined as ladder cracks, spalling, pull-outs, cracks, chips, flakes, lifting, or color changes.
9. Friction damage is defined as material transfer on the part surface or other contaminants found.

RC: End

10. Manual titles are referred to by acronyms. Refer to Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 10., References, for definition of the acronyms.
11. Obey all of the warnings and cautions given in the specified manual sections.

RC: Start

12. Unless shown differently, these dimensions and tolerances are used:
 - Linear dimensions are in inches
 - Tolerance on linear dimensions, other than rivet and bolt edge margins, is plus or minus 0.03 inch
 - Tolerance on rivet and bolt edge margin is plus or minus 0.05 inch
 - Angular tolerance is plus or minus 2 degrees
 - Hole dimensions for standard solid rivets and fasteners are in SRM Chapter 51
 - Torque Values:
 - Values for structural fasteners are given in 787 Structural Repair Manual, Chapter 51.
 - Values for airframe maintenance tasks are included in Chapter 20 of 787 Aircraft Maintenance Manual (AMM).
 - Values for electrical maintenance tasks are included in Chapter 20 of Standard Wiring Practices Manual (SWPM).
 - Values for engine maintenance tasks are included in Chapter 70 of 787 Aircraft Maintenance Manual (AMM).
 - Non-standard torque values for maintenance tasks are included in the applicable installation step.
13. If it is necessary to remove more parts for access, you can remove those parts. If you can get access without removing identified parts, it is not necessary to remove all of the identified parts. Jacking and shoring limitations must be observed.

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14. Where the work instructions include installation of a kept part, a new or serviceable part with the same part number can be installed as an alternative to the kept part.

RC: End

15. Refer to Appendix A, B and C for logic diagrams(s). Logic diagrams are provided as an aid only. Information contained in Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 5., Compliance, is the primary source for compliance times. Information in Step 2., Work Instructions, is the primary source for tasks required for compliance.

16. Use of colors in Tasks is based on guidance from the S1000D International specification for technical publications.

2. WORK INSTRUCTIONS

RC: Start

A. Actions Required for Compliance

(1) Requirements

Table 1 LEFT AND RIGHT MAIN LANDING GEAR (MLG) TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
All Airplanes	Lubricate both the left and right Main Landing Gear (MLG) truck beam and inner cylinder pivot joint with MIL-PRF-32014 grease.	-	Task 1
	Review maintenance program documentation to verify that it includes lubrication tasks for the left and right MLG Truck Beam and Inner Cylinder Pivot Joint with MIL-PRF-32014 grease at intervals not to exceed 50 flight cycles or 25 days whichever comes later.	-	-

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Table 1 LEFT AND RIGHT MAIN LANDING GEAR (MLG) TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 1: MAINTENANCE PROGRAM DOCUMENTATION DOES NOT INCLUDE PIVOT JOINT LUBRICATION WITH MIL-PRF-32014 GREASE AT INTERVALS NOT TO EXCEED 50 FLIGHT CYCLES OR 25 DAYS WHICHEVER OCCURS LATER.	Update the maintenance program documentation to incorporate lubrication tasks for the left and right MLG Truck Beam and Inner Cylinder Pivot Joint with MIL-PRF-32014 grease at intervals not to exceed 50 flight cycles or 25 days, whichever occurs later.	-	-
CONDITION 2: MAINTENANCE PROGRAM DOCUMENTATION INCLUDES PIVOT JOINT LUBRICATION WITH MIL-PRF-32014 GREASE AT INTERVALS NOT TO EXCEED 50 FLIGHT CYCLES OR 25 DAYS WHICHEVER OCCURS LATER.	No further action required.	-	-

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Group 1, Configuration 1:

Table 2 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
All Airplanes	-	-	PART 1: GET ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	-	-	PART 2: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN REMOVAL
	Do a detailed and Fluorescent Penetrant Inspection (FPI) of both the left and right MLG Pivot Pin OD surface for friction and heat damage.	Task 2	-
CONDITION 1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE PIVOT PIN OD SURFACE	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	Repeat the detailed and Fluorescent Penetrant Inspection(FPI) of the Pivot Pin outer diameter (OD)surface for heat and friction damage	Task 2	*[1]
CONDITION 2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE PIVOT PIN OD SURFACE	Do a detailed and FPI inspection on the inner cylinder lug bore for heat and friction damage	Task 4	-

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Table 2 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install a new Pivot Pin	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 5: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT- INNER CYLINDER BUSHING INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage	Task 2	*[1]
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs.	-	-
	ACTION 1: Install a new Pivot Pin	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage	Task 2	*[1]

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Table 2 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
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*[1] Installation of defect-free Pivot Pin and concurrent or prior replacement of Aluminum-Nickel-Bronze inner cylinder bushings with Copper-Nickel-Tin inner cylinder bushings and incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease is terminating action to the repeat inspections for that side of the MLG.

Group 1, Configuration 1:

Table 3 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
All Airplanes	-	-	PART 1: GET ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	-	-	PART 2: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN REMOVAL
	Do a detailed inspection of both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Task 3	-

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-00A-933A-D

Issue 001, 09 Nov 2020

Table 3 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 1: NO INNER CYLINDER BUSHING ID EXCESSIVE WEAR, NO CRACK AND NO SMEARING FOUND	ACTION 1: Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear	-	Task 1
	-	-	PART 3: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECT INNER CYLINDER BUSHING LUBE PASSAGE
	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	ACTION 2: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Task 3	*[1]
CONDITION 2: ANY INNER CYLINDER BUSHING ID EXCESSIVE WEAR, CRACK OR ANY SMEARING FOUND	Do a detailed and FPI inspection of the inner cylinder lug bore for heat and friction damage	Task 4	-

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-00A-933A-D

Issue 001, 09 Nov 2020

Table 3 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1 (OPTION 1): Install new Aluminum-Nickel-Bronze Inner Cylinder Bushing(s) ACTION 1 (OPTION 2): Install new Copper-Nickel-Tin Inner Cylinder Bushing(s). *[1]*[2]	-	Task 5
	OPTION 1 and OPTION 2 (ACTION 2): Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear	-	Task 1
	-	-	PART 3: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECT INNER CYLINDER BUSHING LUBE PASSAGE
	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
		Task 3	*[1]

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-00A-933A-D

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Table 3 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
	OPTION 1 and OPTION 2 (ACTION 3): Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material		
CONDITION 2.2: ANY HEAT DAMAGE OR FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs.	-	-
	ACTION 1: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	Task 3	*[1]

*[1] Installation of Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease constitutes terminating action to the repeat inspections for that side of the MLG.

*[2] Installation of Copper-Nickel-Tin bushings is one way interchangeable. Aluminum-Nickel-Bronze inner cylinder bushings can no longer be installed for that side of the MLG.

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-00A-933A-D

Issue 001, 09 Nov 2020

Group 1, Configuration 2; Group 2:

Table 4 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
All Airplanes	-	-	PART 1: GET ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	-	-	PART 2: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN REMOVAL
	Do a detailed and Fluorescent Penetrant Inspection (FPI) of both the left and right MLG Pivot Pin OD surface for friction and heat damage.	Task 2	-
CONDITION 1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE PIVOT PIN OD SURFACE	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	Repeat the detailed and Fluorescent Penetrant Inspection(FPI) of the Pivot Pin outer diameter(OD) surface for heat and friction damage	Task 2	*[1]
CONDITION 2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE PIVOT PIN OD SURFACE	Do a detailed and FPI inspection on the inner cylinder lug bore for heat and friction damage.	Task 4	-

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-00A-933A-D

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Table 4 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install a new Pivot Pin	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 5: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT- INNER CYLINDER BUSHING INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage	Task 2	*[1]
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs.	-	-
	ACTION 1: Install a new Pivot Pin	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage	Task 2	*[1]

Applicable To:

Model 787

See Applicability of this data module

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Table 4 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
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*[1] Installation of defect-free Pivot Pin and Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease is terminating action to the repeat inspections for that side of the MLG.

Group 1, Configuration 2; Group 2:

Table 5 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
All Airplanes	-	-	PART 1: GET ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	-	-	PART 2: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN REMOVAL
	Do a detailed inspection of both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Task 3	-

Applicable To:

Model 787

See Applicability of this data module

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Table 5 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 1: NO INNER CYLINDER BUSHING ID EXCESSIVE WEAR, NO CRACK AND NO SMEARING FOUND	ACTION 1: Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear.	-	Task 1
	-	-	PART 3: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECT INNER CYLINDER BUSHING LUBE PASSAGE
	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	ACTION 2: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Task 3	*[1]
CONDITION 2: ANY INNER CYLINDER BUSHING ID EXCESSIVE WEAR, CRACK OR ANY SMEARING FOUND	Do a detailed and FPI inspection of the inner cylinder lug bore for heat and friction damage.	Task 4	-

Applicable To:

Model 787

See Applicability of this data module

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Table 5 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install new Copper-Nickel-Tin Inner Cylinder Bushing(s).	-	Task 6
	ACTION 2: Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear.	-	Task 1
	-	-	PART 3: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECT INNER CYLINDER BUSHING LUBE PASSAGE
	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	ACTION 3: Repeat the detailed inspections for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	Task 3	*[1]

Applicable To:

Model 787

See Applicability of this data module

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Table 5 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs.	-	-
	ACTION 1: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	Task 3	*[1]

*[1] Installation of Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease constitutes terminating action to the repeat inspections for that side of the MLG.

RC: End

Group 1-2:

B. Procedures:

(1) PART 1: GET ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT



MOVE THE DOOR SAFETY HANDLES TO THE SAFE POSITION. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.



USE EQUIPMENT TO HOLD THE MAIN LANDING GEAR TRUCK BEFORE YOU REMOVE THE PIVOT PIN. MOVEMENT OF THE MAIN LANDING GEAR TRUCK CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

- Make sure the downlock pins are installed in the left and right Main Landing Gear (MLG). Refer to 787 AMM 32-00-30 as an accepted procedure.
- Deactivate and lock the left and right MLG doors. Refer to 787 AMM 32-00-15 as an accepted procedure.
- Deactivate and depressurize the central hydraulic system. Refer to 787 AMM 29-11-00 as an accepted procedure.
- Deflate the shock strut for the left and right MLG. Refer to 787 AMM 32-11-18 as an accepted procedure.

Applicable To:

Model 787

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- (e) Install support for landing gear torsion link and retention straps for shock strut as necessary. Refer to 787 AMM 32-11-18 as an accepted procedure.
- (f) Lift the airplane on jacks until the wheels are off the ground. Refer to 787 AMM 07-11-01 as an accepted procedure.
- (g) Jack the MLG truck axles as necessary to remove load from pivot pins. Refer to 787 AMM 32-11-18 as an accepted procedure.

NOTE: Aircraft jacking must be to a suitable height to articulate the truck beam assy "Toes Down" to remove pivot pin staking pin.

(2) PART 2: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN REMOVAL

- (a) Remove the left and right MLG Pivot Pins. Use the MLG bogie pivot pin removal equipment. Refer to 787 AMM 32-11-18 as an accepted procedure.

(3) PART 3: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECT INNER CYLINDER BUSHING LUBE PASSAGE

- (a) Remove the dried grease and apply grease at Inner Cylinder lubrication fitting. Refer to 787 AMM 12-21-14 as an accepted procedure.

NOTE: Make sure grease is visible at inner cylinder Bushing ID.

(4) PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION

- (a) Install new or kept left and right MLG Pivot Pins. Use the MLG bogie pivot pin removal equipment. Refer to 787 AMM 32-11-18 as an accepted procedure.

NOTE: If necessary, move the jacks to make the installation of the pivot pin easier.

(5) PART 5: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION

- (a) Clean inner cylinder lug bore of contaminants and grease. Refer to SOPM 20-30-03 and SOPM 20-30-02 as accepted procedures.
- (b) Apply BMS10-11, Type 1 primer to the contact surfaces. Refer to SOPM 20-10-07 as an accepted procedure.
- (c) Install new or kept inner cylinder bushing. Refer to 787-8 CMM 32-11-74, 787-9 CMM 32-13-06 or 787-10 CMM 32-10-37 as accepted procedures.
- (d) Apply BMS5-142, Type 2 sealant. Refer to SOPM 20-50-19 as an accepted procedure.
- (e) Apply MIL-PRF-32014 grease. Refer to 787 AMM 12-21-14 and 787 AMM 12-21-00 as accepted procedures.
- (f) For Group 1 Configuration 1 airplanes: Re-identify the Inner Cylinder Assembly if Cu-Ni-Sn bushings are installed. There is no equivalent Boeing part number for the changed part. Identify on the part that the change given in this bulletin was done. Use the rubber stamp (Code RO) or ink jet (Code J) method. Refer to SOPM 20-50-10 as an accepted procedure.

Applicable To:

Model 787

See Applicability of this data module

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(6) PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT

MAKE SURE THE LANDING GEAR DOWNLOCK PINS ARE INSTALLED. THIS WILL PREVENT ACCIDENTAL RETRACTION OF THE LANDING GEAR, INJURY TO PERSONS, AND DAMAGE TO EQUIPMENT.



MOVE THE DOOR SAFETY HANDLES TO THE SAFE POSITION. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

- (a) Remove the MLG truck jacks as necessary. Refer to 787 AMM 32-11-18 as an accepted procedure.
- (b) Lower the airplane from its jacked position. Refer to Lower the Airplane from Jacks - Handling, 787 AMM 07-11-01, as an accepted procedure.
- (c) Remove support for landing gear torsion link and retention straps for shock strut. Refer to 787 AMM 32-11-18 as an accepted procedure.
- (d) Inflate the shock strut for the left and right MLG. Refer to 787 AMM 32-11-18 as an accepted procedure.
- (e) Do shock strut servicing procedure for each MLG. Refer 787 AMM 12-15-01 to as an accepted procedure.
- (f) Activate the central hydraulic system. Refer to 787 AMM 29-11-00 as an accepted procedure.
- (g) Activate the left and right MLG doors. Refer to 787 AMM 32-00-15 as an accepted procedure.
- (h) Remove the downlock pins. Refer 787 AMM 32-00-30, as an accepted procedure.
- (i) Put the airplane back to a serviceable condition.

Applicable To:

Model 787

See Applicability of this data module

End of data module**B787-A-32-00-0045-00A-933A-D****Issue 001, 09 Nov 2020**

Alert Service Bulletin B787-81205-SB320045-00**Task 1 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER
PIVOT JOINT - LUBRICATION [Group 1-2:]**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

Reference	Title
787 AMM 12-21-14	MAIN LANDING GEAR AND ACTUATING MECHANISM MAINTENANCE
787 AMM 12-21-00	LUBRICATION

Preliminary Requirements**Required Conditions**

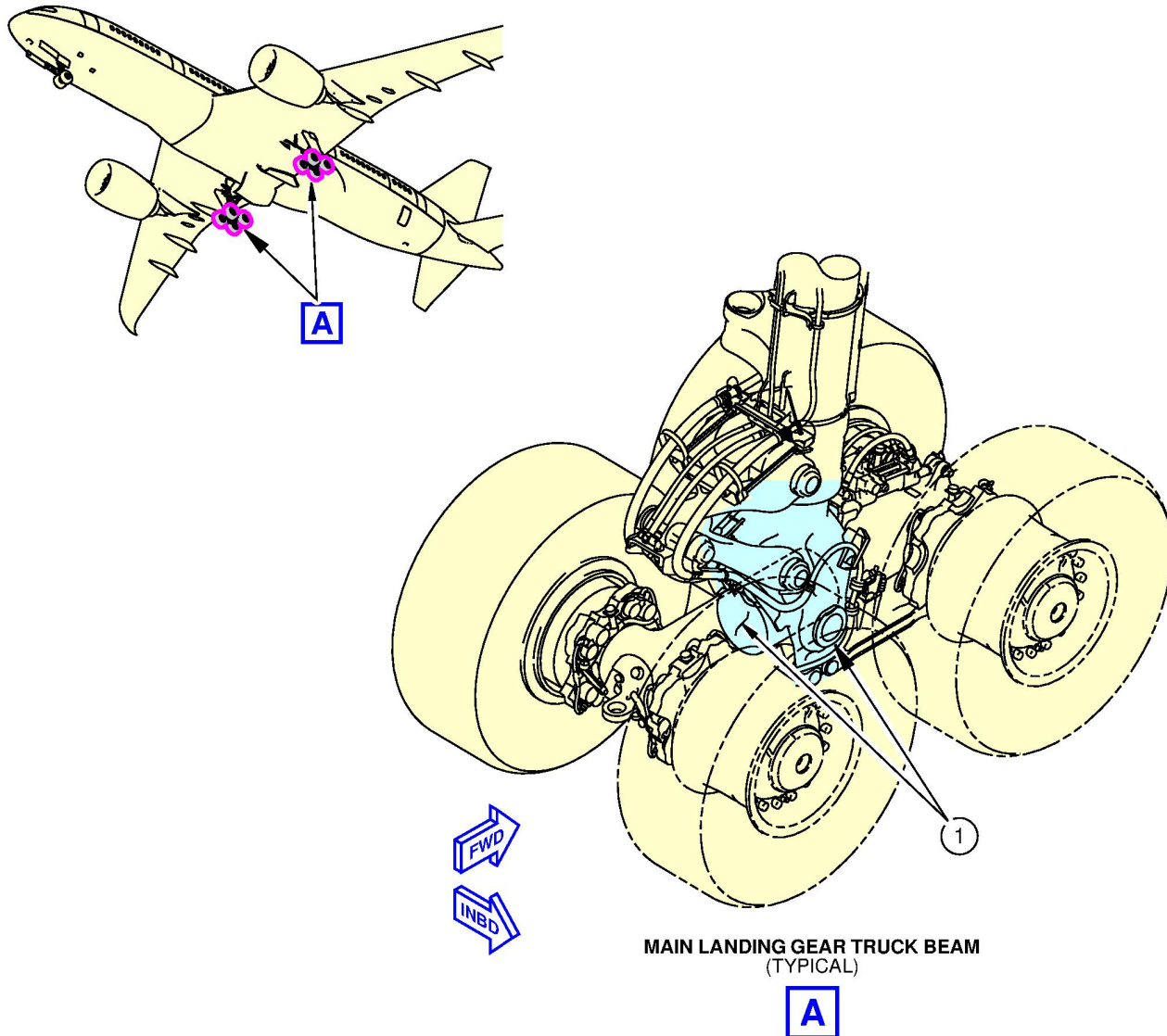
Action/Condition	Data Module/Technical Publication
Alert Service Bulletin B787-81205-SB320045-00 - ACCOMPLISHMENT INSTRUCTIONS	B787-A-32-00-0045-00A-933A-D Issue 001

Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-01A-933B-D
Issue 001, 09 Nov 2020

Procedure

This Task applies to Group 1-2:



ICN-B787-A-000061-A-81205-18108-A-01-1

Figure 1 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION

1. Table 1

Step	Action	Name	Identification	Qty	More Data
1	Apply	GREASE	MIL-PRF-32014	-	*[1]

*[1] Apply MIL-PRF-32014 grease. Refer to 787 AMM 12-21-14 and 787 AMM 12-21-00 as accepted procedures.

Applicable To:
Model 787
See Applicability of this data module

End of data module

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RC: Start**Alert Service Bulletin B787-81205-SB320045-00****Task 2 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER
PIVOT JOINT - PIVOT PIN INSPECTION [Group 1-2:]**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

Reference	Title
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION

Preliminary Requirements**Required Conditions**

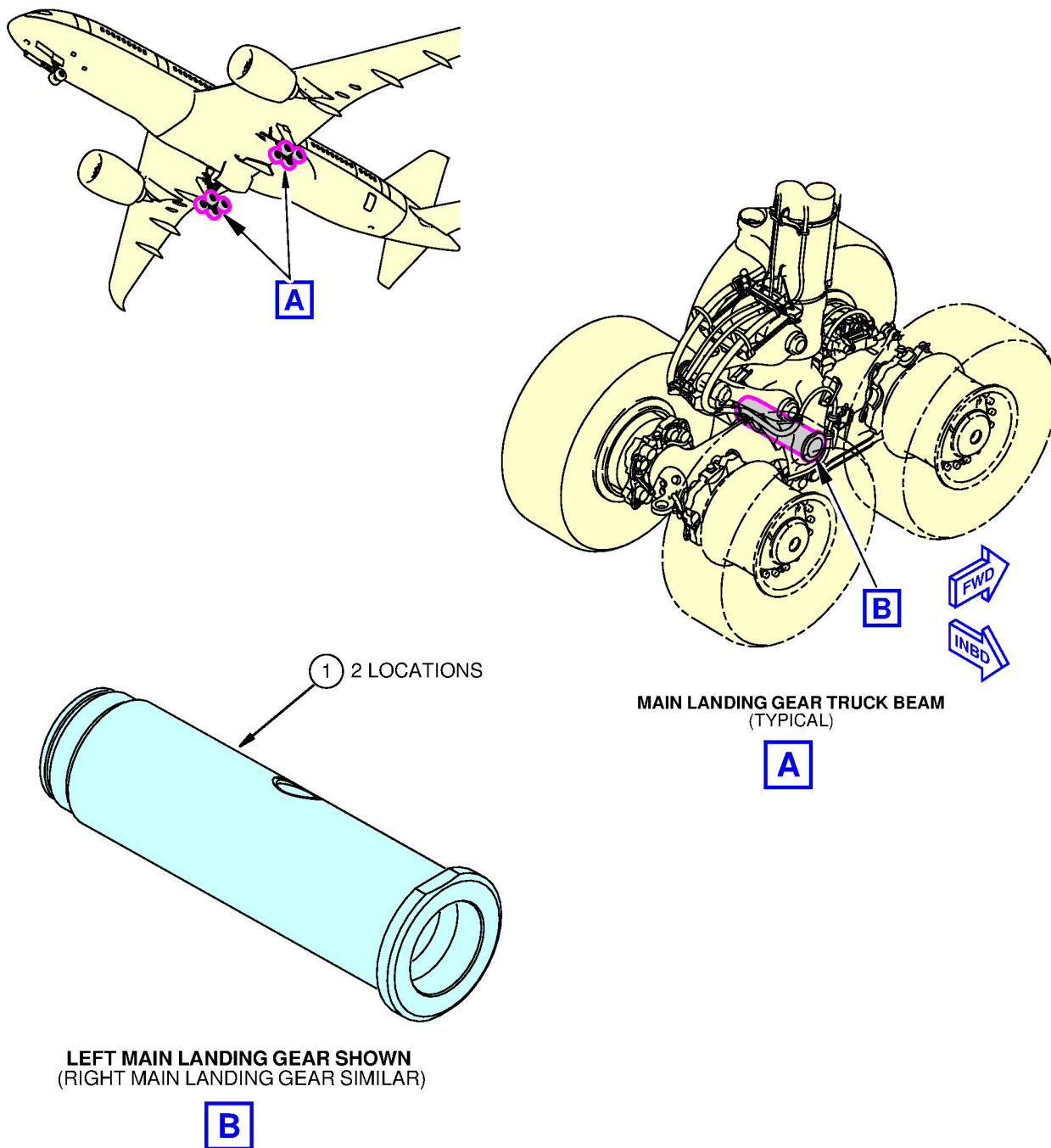
Action/Condition	Data Module/Technical Publication
Alert Service Bulletin B787-81205-SB320045-00 - ACCOMPLISHMENT INSTRUCTIONS	B787-A-32-00-0045-00A-933A-D Issue 001

Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-02A-933B-D
Issue 001, 09 Nov 2020

Procedure

This Task applies to Group 1-2:



2935489

ICN-B787-A-000061-A-81205-18109-A-01-1

Figure 1 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Applicable To:

Model 787

See Applicability of this data module

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1. The step numbers shown below agree with the numbers shown in the circle symbols in the Task. The QTY numbers shown below are the number of parts necessary for this task.

Table 1

Step	Action	Name	Identification	Qty	More Data
1	Inspect	PIVOT PIN COMPONENT ASSEMBLY	515Z2003-()	2	*[1]

*[1] Do a detailed and Fluorescent Penetrant Inspection of the Pivot Pin OD surface for heat and friction damage. Refer to SOPM 20-20-02 as an accepted procedure.

RC: End

Applicable To:

Model 787

See Applicability of this data module

End of data module

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RC: Start**Alert Service Bulletin B787-81205-SB320045-00****Task 3 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER
PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION [Group 1-2:]**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

Preliminary Requirements**Required Conditions**

Action/Condition	Data Module/Technical Publication
Alert Service Bulletin B787-81205-SB320045-00 - ACCOMPLISHMENT INSTRUCTIONS	B787-A-32-00-0045-00A-933A-D Issue 001

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-03A-933B-D**Issue 001, 09 Nov 2020**

Procedure

This Task applies to Group 1-2:

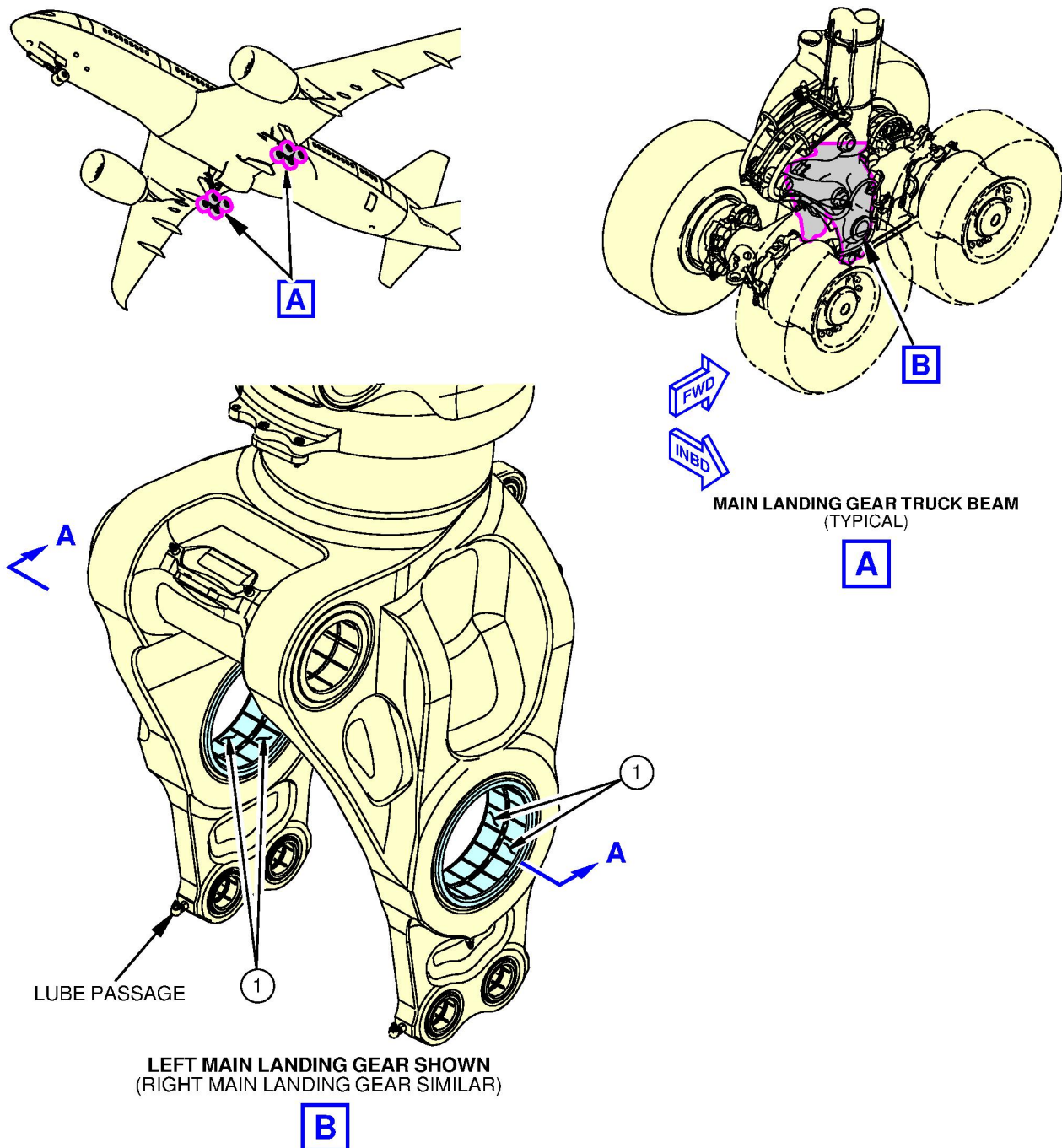


Figure 1 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

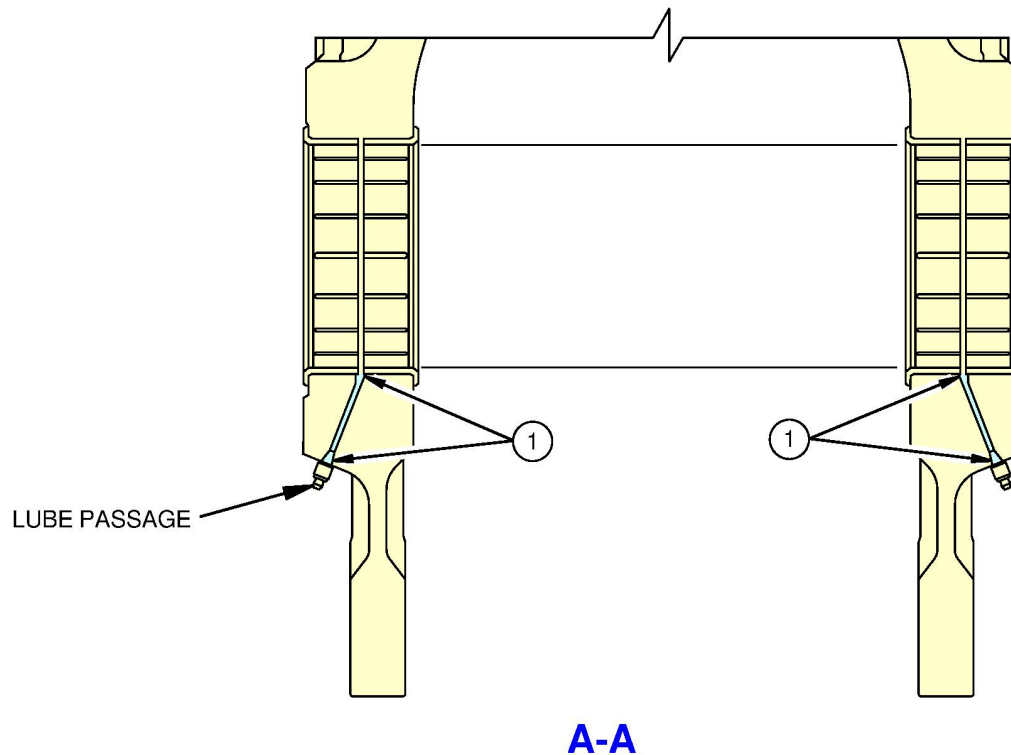
Applicable To:

Model 787

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2938392

ICN-B787-A-000061-A-81205-18111-A-01-1

Figure 2 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

1. The step numbers shown below agree with the numbers shown in the circle symbols in the Task. The QTY numbers shown below are the number of parts necessary for this task.

Table 1

Step	Action	Name	Identification	Qty	More Data
1	Inspect	BUSH - INNER CYLIN- DER TO BOGIE	512Z3002-()	8	*[1]

*[1] Do a detailed inspection of both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material. MLG inner cylinder bushing inner diameter (ID) design dimensional limits can be found in 787-8 CMM 32-11-79 or 787-9 CMM 32-12-20 or 787-10 CMM 32-10-36 'FITS AND CLEARANCES'.

RC: End

Applicable To:

Model 787

See Applicability of this data module

End of data module

B787-A-32-00-0045-03A-933B-D

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RC: Start**Alert Service Bulletin B787-81205-SB320045-00****Task 4 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER LUG BORE INSPECTION [Group 1-2:]**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

Reference	Title
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION

Preliminary Requirements**Required Conditions**

Action/Condition	Data Module/Technical Publication
Alert Service Bulletin B787-81205-SB320045-00 - ACCOMPLISHMENT INSTRUCTIONS	B787-A-32-00-0045-00A-933A-D Issue 001

Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-04A-933B-D
Issue 001, 09 Nov 2020

Procedure

This Task applies to Group 1-2:

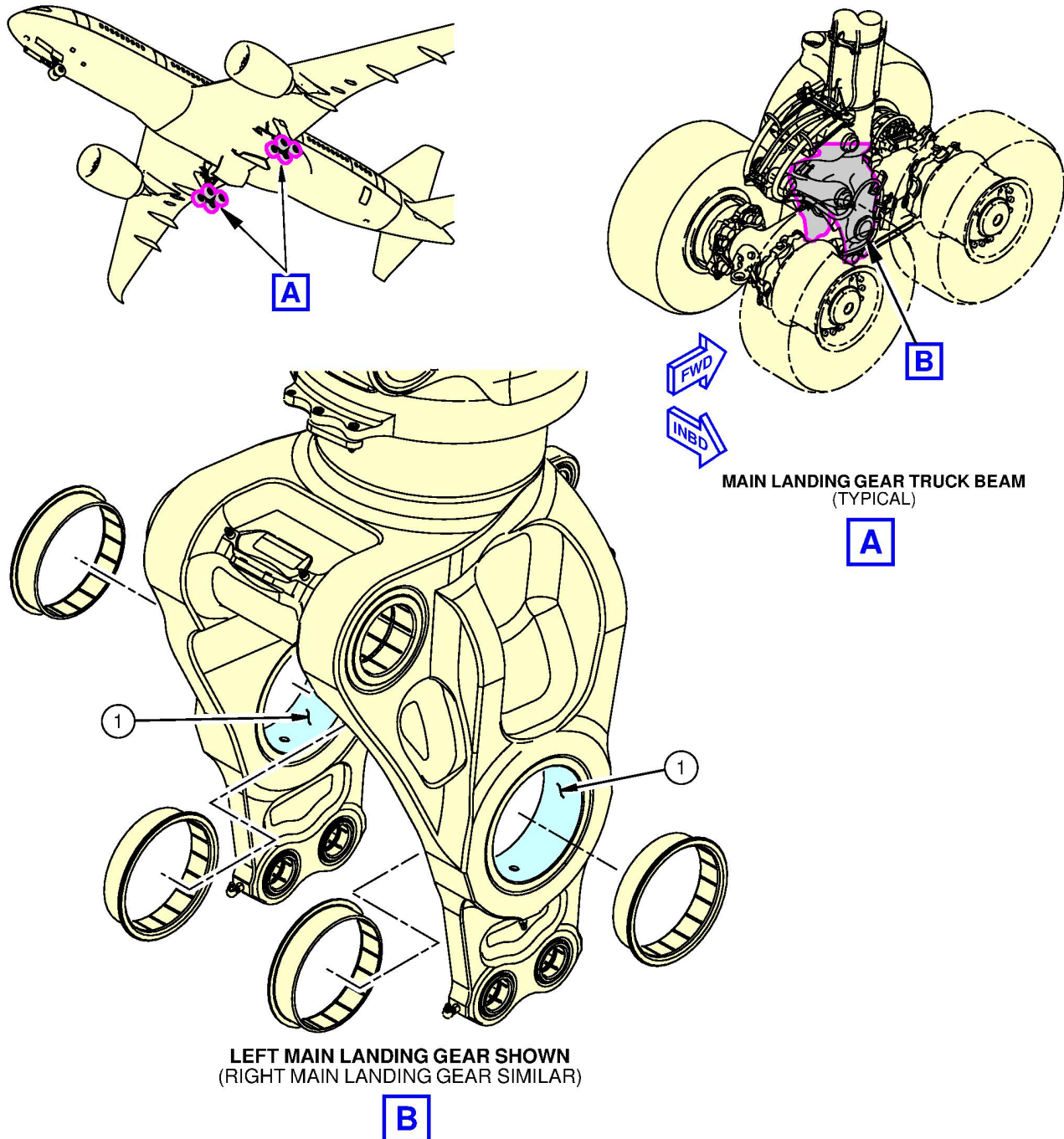


Figure 1 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER LUG BORE INSPECTION

Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-04A-933B-D
Issue 001, 09 Nov 2020

1. The step numbers shown below agree with the numbers shown in the circle symbols in the Task. The QTY numbers shown below are the number of parts necessary for this task.

Table 1

Step	Action	Name	Identification	Qty	More Data
1	Inspect	INNER CYLINDER	512Z3001-()	-	*[1]

*[1] Do a detailed and FPI inspection of the inner cylinder lug bore inner diameter coating, chamfer, and face surfaces for heat and friction damage. Refer to SOPM 20-20-02 as an accepted procedure.

RC: End

Applicable To:

Model 787

See Applicability of this data module

End of data module

B787-A-32-00-0045-04A-933B-D

Issue 001, 09 Nov 2020

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Alert Service Bulletin B787-81205-SB320045-00**Task 5 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER
PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION [Group 1:]**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

Reference	Title
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-10-07	MACHINING OF TITANIUM
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-50-19	GENERAL SEALING
SOPM 20-50-10	APPLICATION OF STENCILS, INSIGNIA, SILK SCREEN, PART NUMBERING AND IDENTIFICATION MARKINGS
787 AMM 12-21-14	MAIN LANDING GEAR AND ACTUATING MECHANISM MAINTENANCE
787 AMM 12-21-00	LUBRICATION

Preliminary Requirements**Required Conditions**

Action/Condition	Data Module/Technical Publication
Alert Service Bulletin B787-81205-SB320045-00 - ACCOMPLISHMENT INSTRUCTIONS	B787-A-32-00-0045-00A-933A-D Issue 001

Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-05A-933B-D
Issue 001, 09 Nov 2020

Procedure

This Task applies to Group 1:

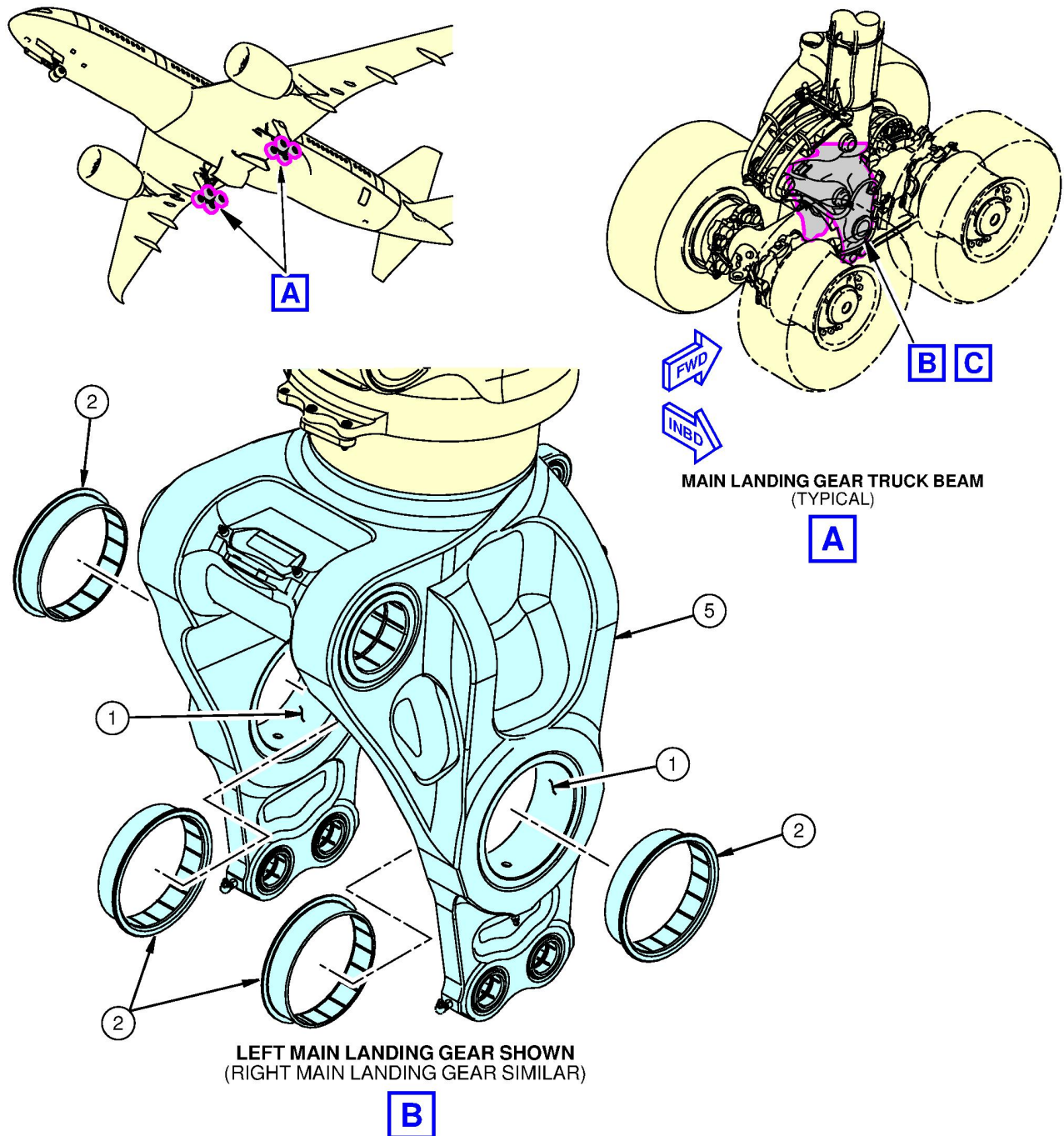
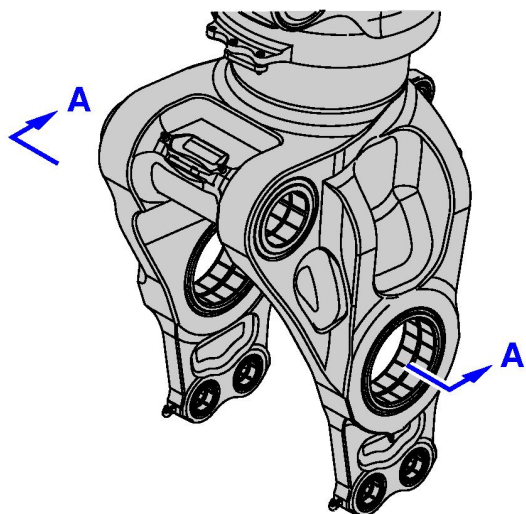


Figure 1 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION

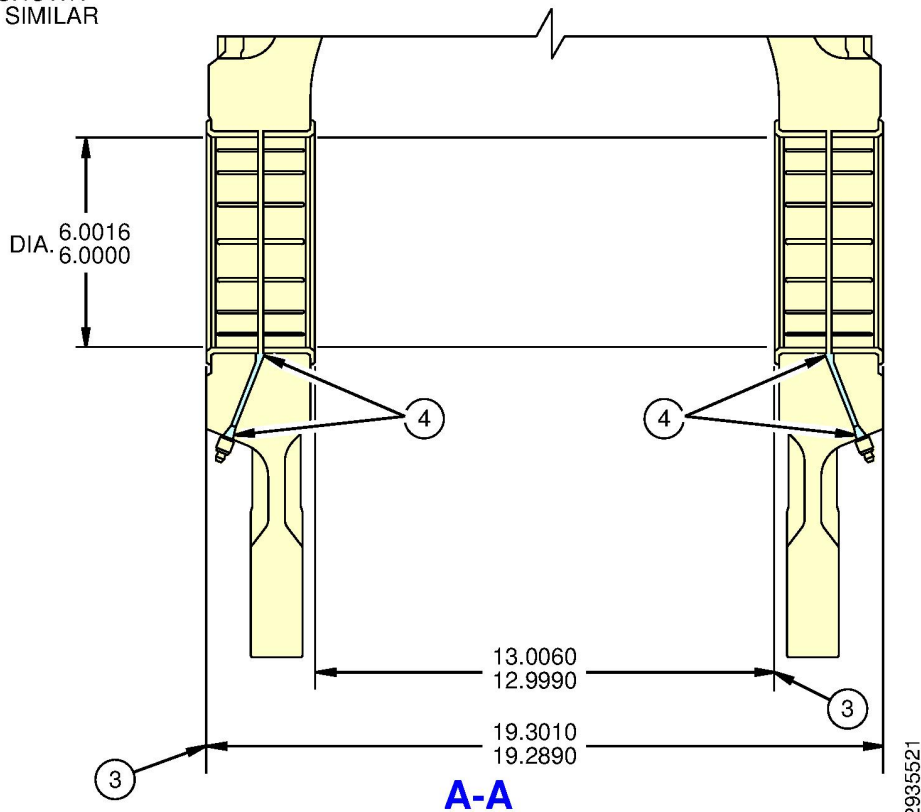
Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-05A-933B-D
Issue 001, 09 Nov 2020



LEFT MAIN LANDING GEAR SHOWN
RIGHT MAIN LANDING GEAR SIMILAR

C



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Figure 2 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-05A-933B-D

Issue 001, 09 Nov 2020

1. The step numbers shown below agree with the numbers shown in the circle symbols in the Task. The QTY numbers shown below are the number of parts necessary for this task.

Table 1

Step	Action	Name	Identification	Qty	More Data
1	Clean	INNER CYLINDER	512Z3001-()	-	*[1]
2	Install (New)	BUSH - INNER CYLINDER TO BOGIE	512Z3002-1 OR 512Z3002-2	-	*[2]*[3]*[4]*[5]*[6]*[7]
3	Measure	BUSHING SEPARATION	-	-	*[8]
4	Apply	GREASE	MIL-PRF-32014	-	*[9]
5	Identify	INNER CYLINDER ASSEMBLY	512Z2001-()	1	*[10]

*[1] Clean off the contaminants and grease, and remove the protective coat. Refer to SOPM 20-30-03 and SOPM 20-30-02 as accepted procedures.

*[2] Apply BMS10-11, Type 1 primer to the contact surfaces. Refer to SOPM 20-10-07 as an accepted procedure.

*[3] Use the shrink-fit method. Refer to SOPM 20-50-03 as an accepted procedure.

*[4] Install and machine as necessary. Refer to 787-8 CMM 32-11-74.

*[5] Apply BMS5-142, Type 2 sealant. Refer to SOPM 20-50-19 as an accepted procedure.

*[6] 512Z5002-1 Oversize Bushing may be required. Refer to 787-9 CMM 32-13-06, 787-10 CMM 32-10-37.

*[7] Installation of Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval constitutes terminating action to the repeat inspections. Installation of Copper-Nickel-Tin inner cylinder bushings changes the airplane configuration into Group 1, Configuration 2.

*[8] Check Bushing external face-to-face dimension (EFD) and inner diameter bore dimensions. Refer to 787-8 CMM 32-11-74 'FITS AND CLEARANCES'.

*[9] Apply MIL-PRF-32014 grease. Refer to 787 AMM 12-21-14 and 787 AMM 12-21-00 as accepted procedures.

*[10] Re-identify the Inner Cylinder Assembly after installation of Cu-Ni-Sn bushings. There is no equivalent Boeing part number for the changed part. Identify on the part that the change given in this bulletin was done. Use the rubber stamp (Code RO) or ink jet (Code J) method. Refer to SOPM 20-50-10 as an accepted procedure.

Applicable To:

Model 787

See Applicability of this data module

End of data module

B787-A-32-00-0045-05A-933B-D

Issue 001, 09 Nov 2020

Alert Service Bulletin B787-81205-SB320045-00**Task 6 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER
PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION [Group 2:]**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

Reference	Title
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-10-07	MACHINING OF TITANIUM
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-50-19	GENERAL SEALING
787 AMM 12-21-14	MAIN LANDING GEAR AND ACTUATING MECHANISM MAINTENANCE
787 AMM 12-21-00	LUBRICATION

Preliminary Requirements**Required Conditions**

Action/Condition	Data Module/Technical Publication
Alert Service Bulletin B787-81205-SB320045-00 - ACCOMPLISHMENT INSTRUCTIONS	B787-A-32-00-0045-00A-933A-D Issue 001

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-06A-933B-D**Issue 001, 09 Nov 2020**

Procedure

This Task applies to Group 2:

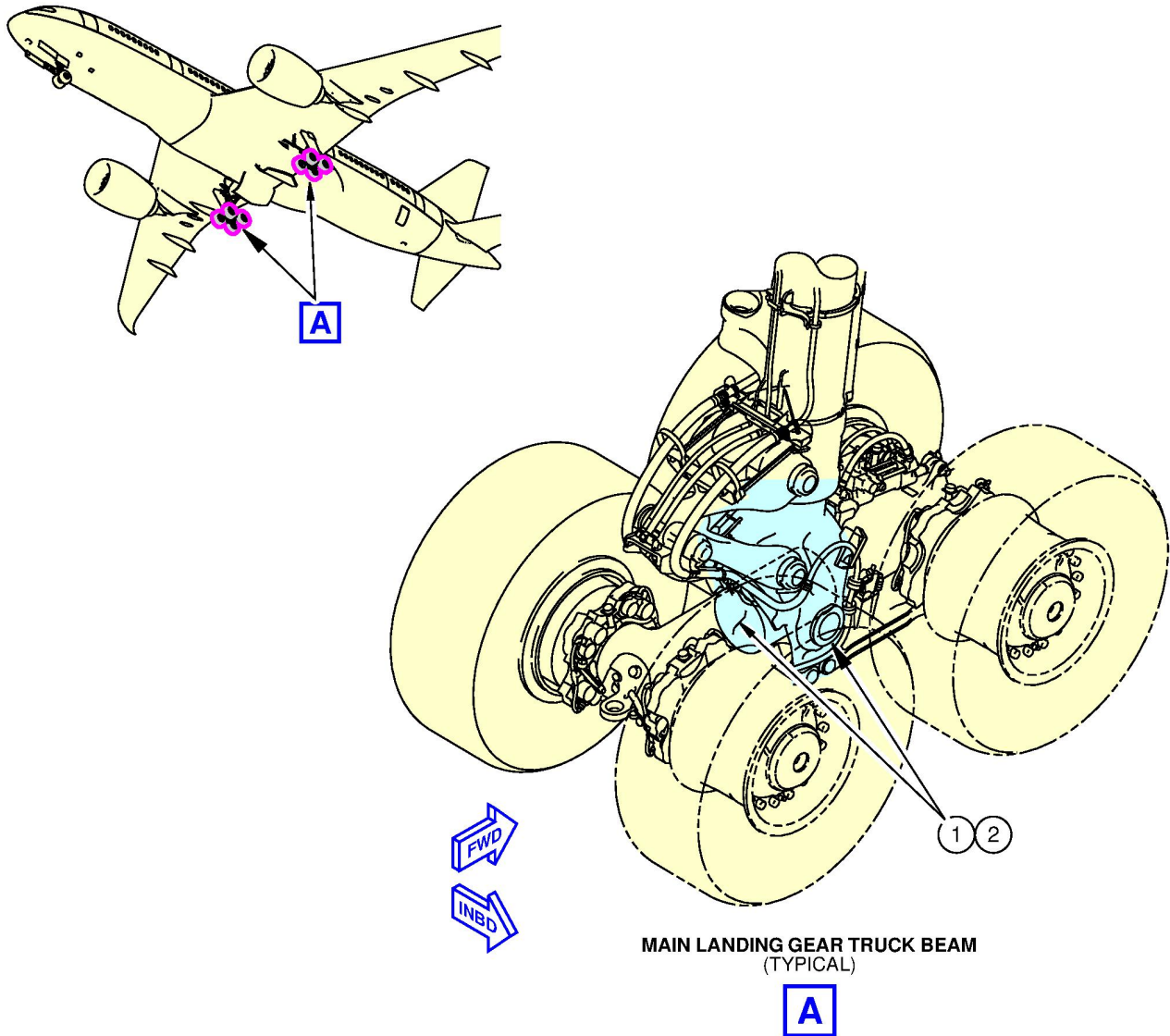
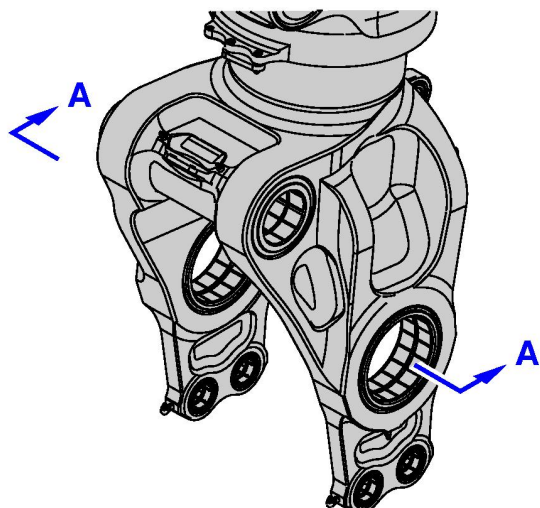


Figure 1 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION

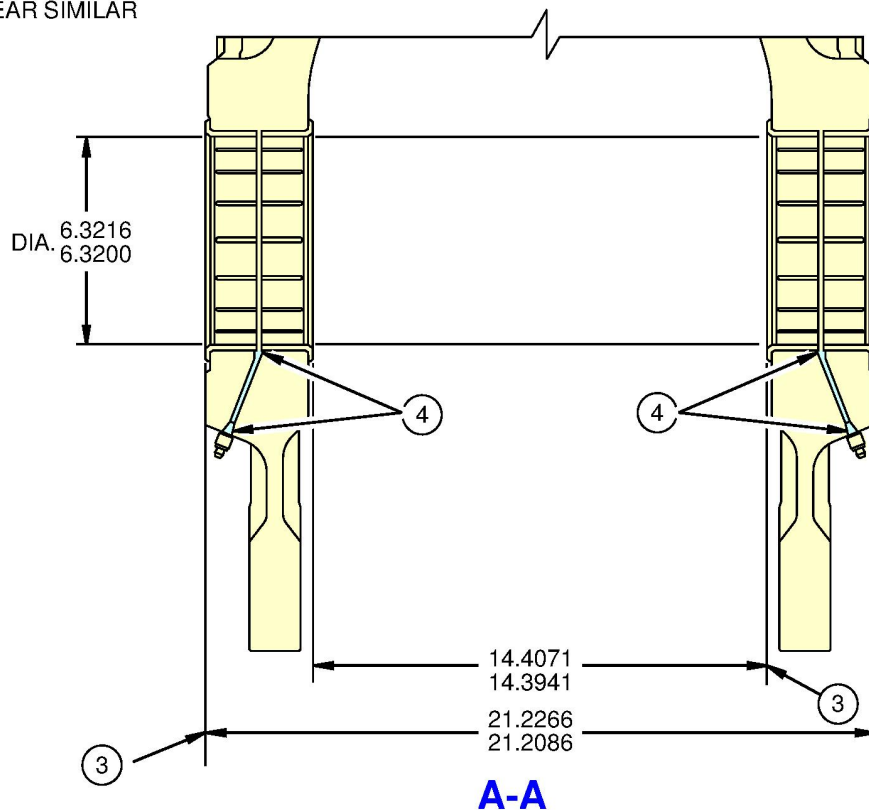
Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-06A-933B-D
Issue 001, 09 Nov 2020



LEFT MAIN LANDING GEAR SHOWN
RIGHT MAIN LANDING GEAR SIMILAR

C



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Figure 2 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSTALLATION

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-06A-933B-D

Issue 001, 09 Nov 2020

1. The step numbers shown below agree with the numbers shown in the circle symbols in the Task. The QTY numbers shown below are the number of parts necessary for this task.

Table 1

Step	Action	Name	Identification	Qty	More Data
1	Clean	INNER CYLINDER	512Z3001-()	-	*[1]
2	Install (New)	BUSH - INNER CYLINDER TO BOGIE	512Z3002-501	-	*[2]*[3]*[4]*[5]*[6]
3	Measure	BUSHING SEPARATION	-	-	*[7]
4	Apply	GREASE	MIL-PRF-32014	-	*[8]

*[1] Clean off the contaminants and grease, and remove the protective coat. Refer to SOPM 20-30-03 and SOPM 20-30-02 as accepted procedures.

*[2] Use the shrink-fit method. Refer to SOPM 20-50-03 as an accepted procedure.

*[3] Install and machine as necessary. Refer to with 787-9 CMM 32-13-06 or 787-10 CMM 32-10-37.

*[4] Apply BMS10-11, Type 1 primer to the contact surfaces. Refer to SOPM 20-10-07 as an accepted procedure.

*[5] Apply BMS5-142, Type 2 sealant. Refer to SOPM 20-50-19 as an accepted procedures.

*[6] 512Z5002-501 Oversize Bushing may be required. Refer to 787-9 CMM 32-13-06, 787-10 CMM 32-10-37.

*[7] Check Bushing external face-to-face dimension (EFD) and inner diameter bore dimensions. Refer to in 787-9 CMM 32-13-06 or 787-10 CMM 32-10-37 'FITS AND CLEARANCES'.

*[8] Apply MIL-PRF-32014 grease. Refer to 787 AMM 12-21-14 and 787 AMM 12-21-00 as accepted procedures.

Applicable To:

Model 787

See Applicability of this data module

End of data module

B787-A-32-00-0045-06A-933B-D

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Alert Service Bulletin B787-81205-SB320045-00**Appendix A – LOGIC DIAGRAM - LEFT AND RIGHT MAIN LANDING GEAR
(MLG) TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION
[Group 1-2:]**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

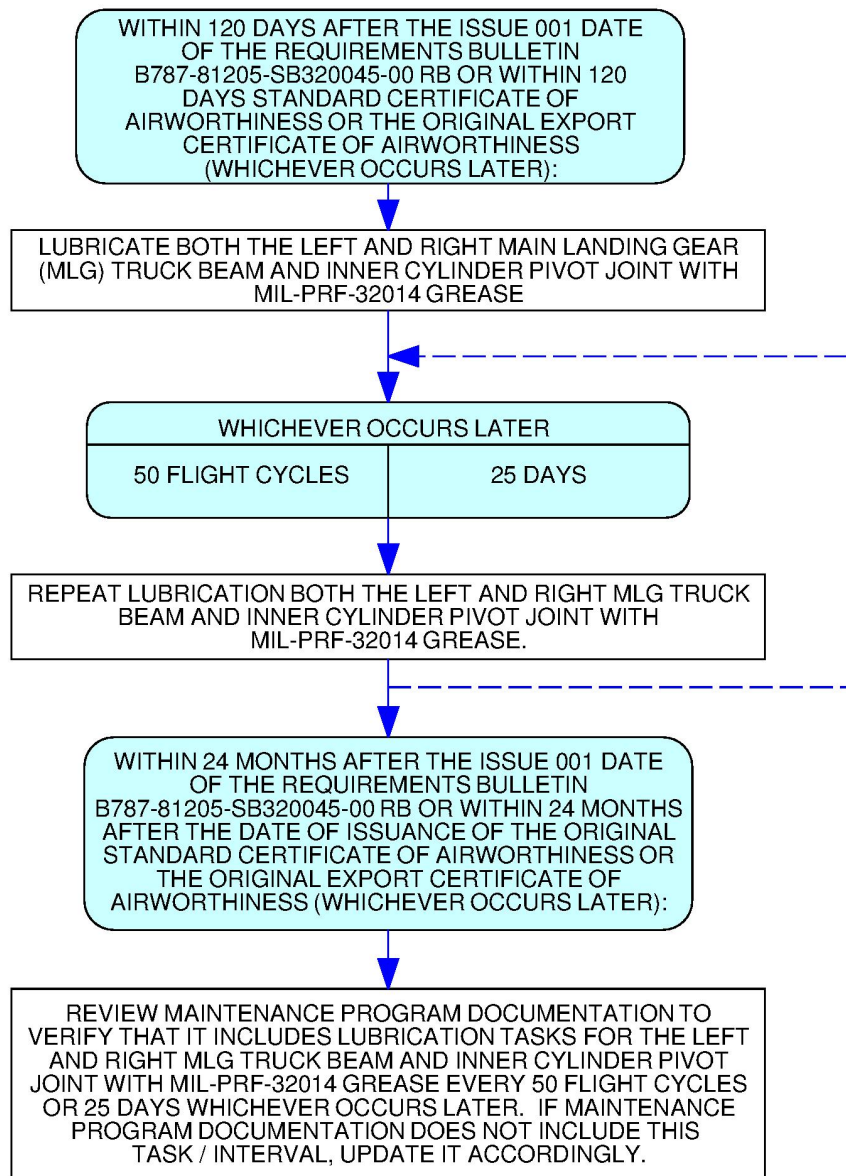
Reference	Title
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 5.	Compliance
SB B787-A-32-00-0045-00A-933A-D Issue 001, Step 2.	Work Instructions

Procedure**Group 1-2:**

1. Logic diagrams are provided as an aid only. Information contained in Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 5., Compliance is the primary source for compliance times. Information contained in Data Module SB B787-A-32-00-0045-00A-933A-D, Step 2., Work Instructions is the primary source for tasks required for compliance.

Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-0AA-931D-D
Issue 001, 09 Nov 2020



2935610

ICN-B787-A-000061-A-81205-18117-A-01-1

Figure 1 LOGIC DIAGRAM FOR PARAGRAPH 1.E. COMPLIANCE: TABLE 5: LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION

Applicable To:

Model 787

See Applicability of this data module

End of data module
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EXPORT CONTROLLED ECCN: 9E991

See title page for details.

Alert Service Bulletin B787-81205-SB320045-00**Appendix B – LOGIC DIAGRAM - LEFT AND RIGHT MLG TRUCK BEAM
AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION [Group 1,
Configuration 1:]**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

Reference	Title
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 5.	Compliance
SB B787-A-32-00-0045-00A-933A-D Issue 001, Step 2.	Work Instructions

Procedure**Group 1, Configuration 1:**

1. Logic diagrams are provided as an aid only. Information contained in Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 5., Compliance is the primary source for compliance times. Information contained in Data Module SB B787-A-32-00-0045-00A-933A-D, Step 2., Work Instructions is the primary source for tasks required for compliance.
2. The table below gives the description for the parts and conditions called out in the logic diagram.

Table 1

Title	Description
ACTION	DO A DETAILED AND FLUORESCENT PENETRANT INSPECTION (FPI) OF BOTH THE LEFT AND RIGHT MLG PIVOT PIN OD SURFACE FOR FRICTION AND HEAT DAMAGE
CONDITION 1	NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE PIVOT PIN OD SURFACE
CONDITION 2	ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE PIVOT PIN OD SURFACE

Applicable To:
Model 787
See Applicability of this data module

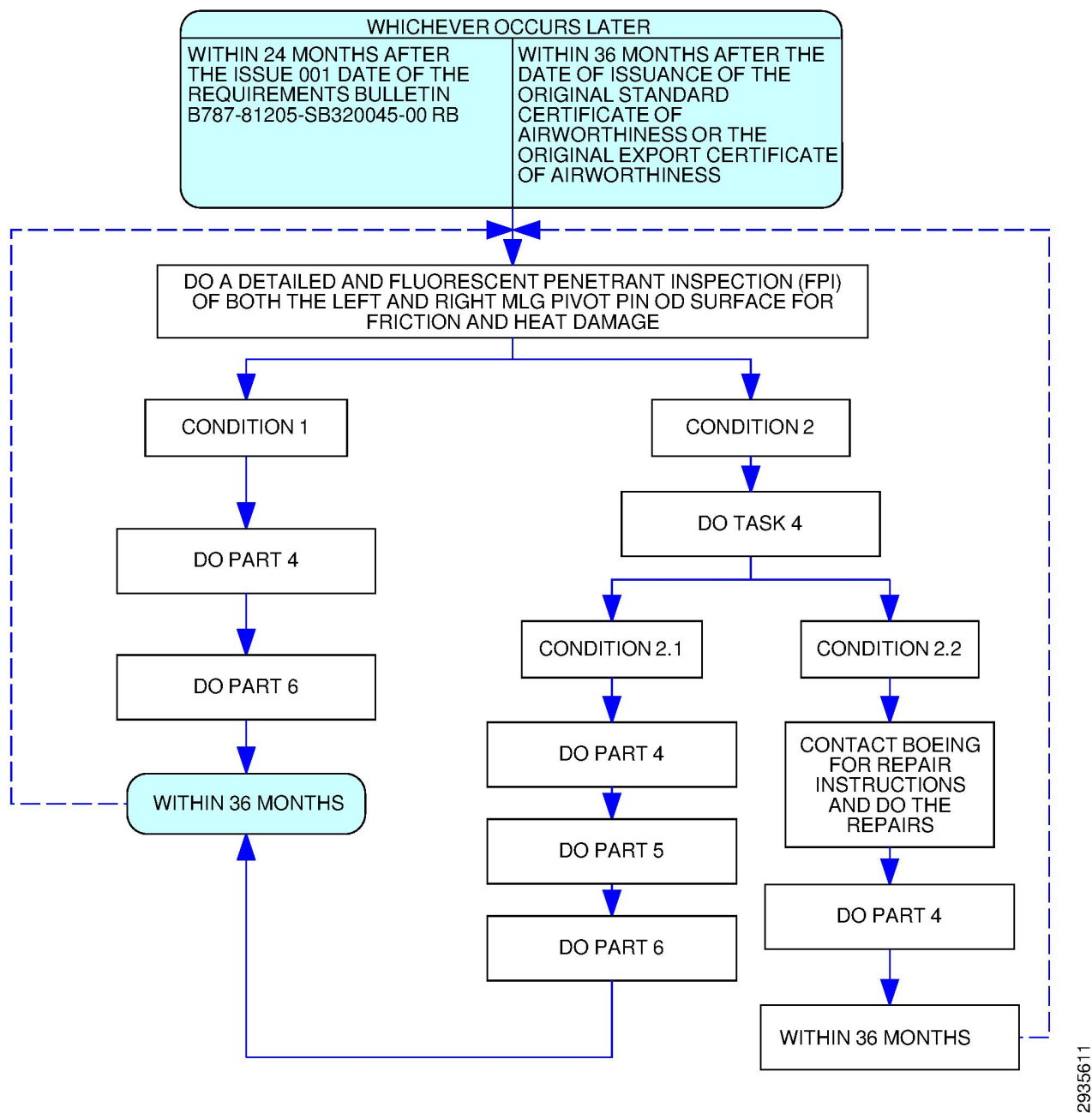
B787-A-32-00-0045-0BA-931D-D
Issue 001, 09 Nov 2020

Table 1

Title	Description
CONDITION 2.1	NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE
CONDITION 2.2	ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE

Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-0BA-931D-D
Issue 001, 09 Nov 2020



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ICN-B787-A-000061-A-81205-18118-A-01-1

Figure 1 LOGIC DIAGRAM FOR PARAGRAPH 1.E. COMPLIANCE: TABLE 6: LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Applicable To:

Model 787

See Applicability of this data module

End of data module
B787-A-32-00-0045-0BA-931D-D
Issue 001, 09 Nov 2020

Alert Service Bulletin B787-81205-SB320045-00**Appendix C – LOGIC DIAGRAM - LEFT AND RIGHT MLG TRUCK BEAM
AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING
INSPECTION [Group 1, Configuration 1:]**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

Reference	Title
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 5.	Compliance
SB B787-A-32-00-0045-00A-933A-D Issue 001, Step 2.	Work Instructions

Procedure**Group 1, Configuration 1:**

- Logic diagrams are provided as an aid only. Information contained in Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 5., Compliance is the primary source for compliance times. Information contained in Data Module SB B787-A-32-00-0045-00A-933A-D, Step 2., Work Instructions is the primary source for tasks required for compliance.
- The table below gives the description for the parts and conditions called out in the logic diagram.

Table 1

Title	Description
ACTION	DO A DETAILED INSPECTION OF BOTH THE LEFT AND RIGHT MLG INNER CYLINDER BUSHING INNER DIAMETER (ID) SURFACE FOR EXCESSIVE WEAR, CRACKS AND SMEARING OF BUSHING MATERIAL
CONDITION 1	NO INNER CYLINDER BUSHING ID EXCESSIVE WEAR, NO SURFACE CRACK AND NO SMEARING FOUND
CONDITION 2	ANY INNER CYLINDER BUSHING ID EXCESSIVE WEAR, SURFACE CRACKING OR ANY SMEARING FOUND

Applicable To:
Model 787
See Applicability of this data module

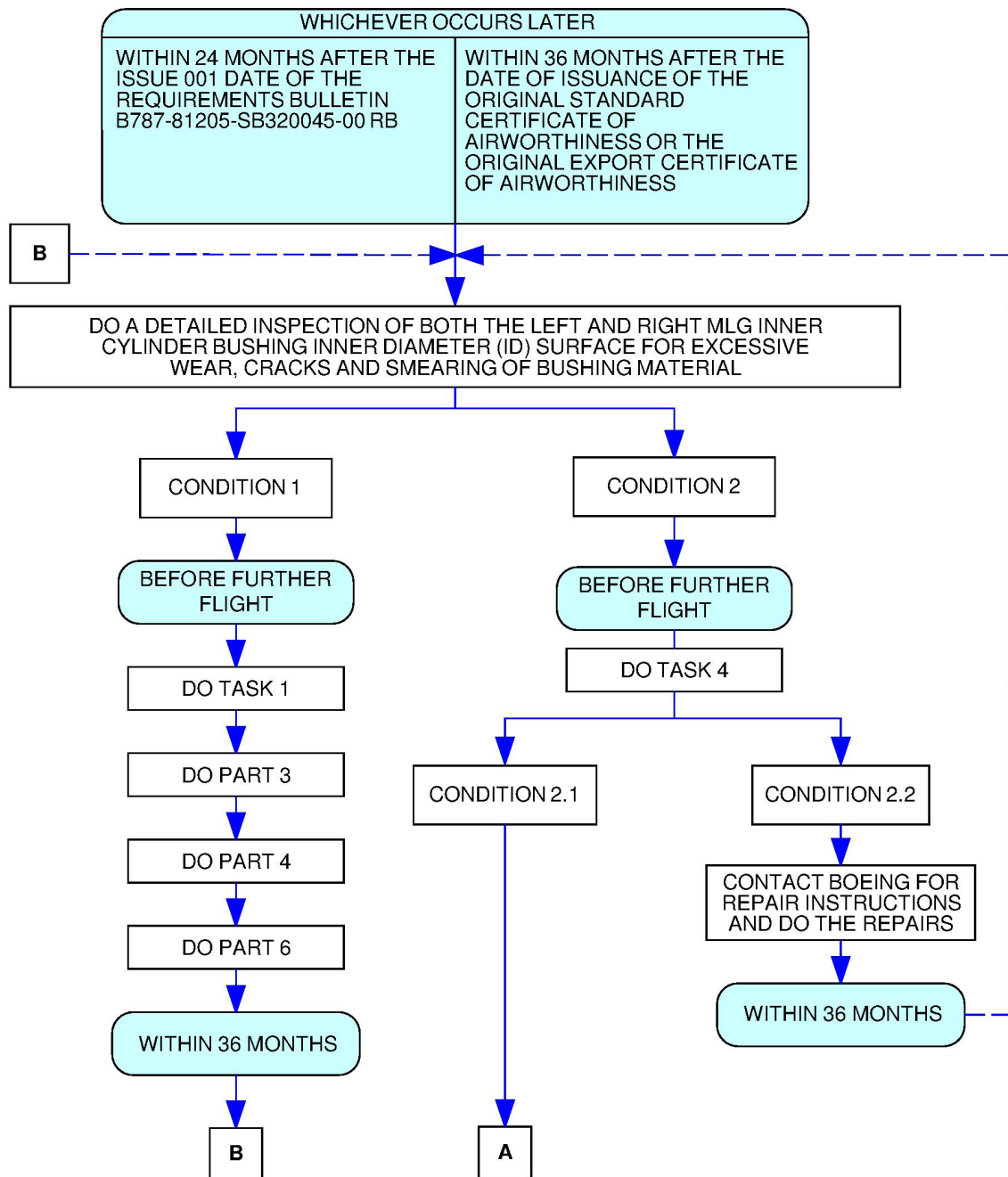
B787-A-32-00-0045-0CA-931D-D
Issue 001, 09 Nov 2020

Table 1

Title	Description
CONDITION 2.1	NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE
CONDITION 2.2	ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE

Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-0CA-931D-D
Issue 001, 09 Nov 2020



2935613

ICN-B787-A-000061-A-81205-18119-A-01-1

Figure 1 LOGIC DIAGRAM FOR PARAGRAPH 1.E. COMPLIANCE: TABLE 7: LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

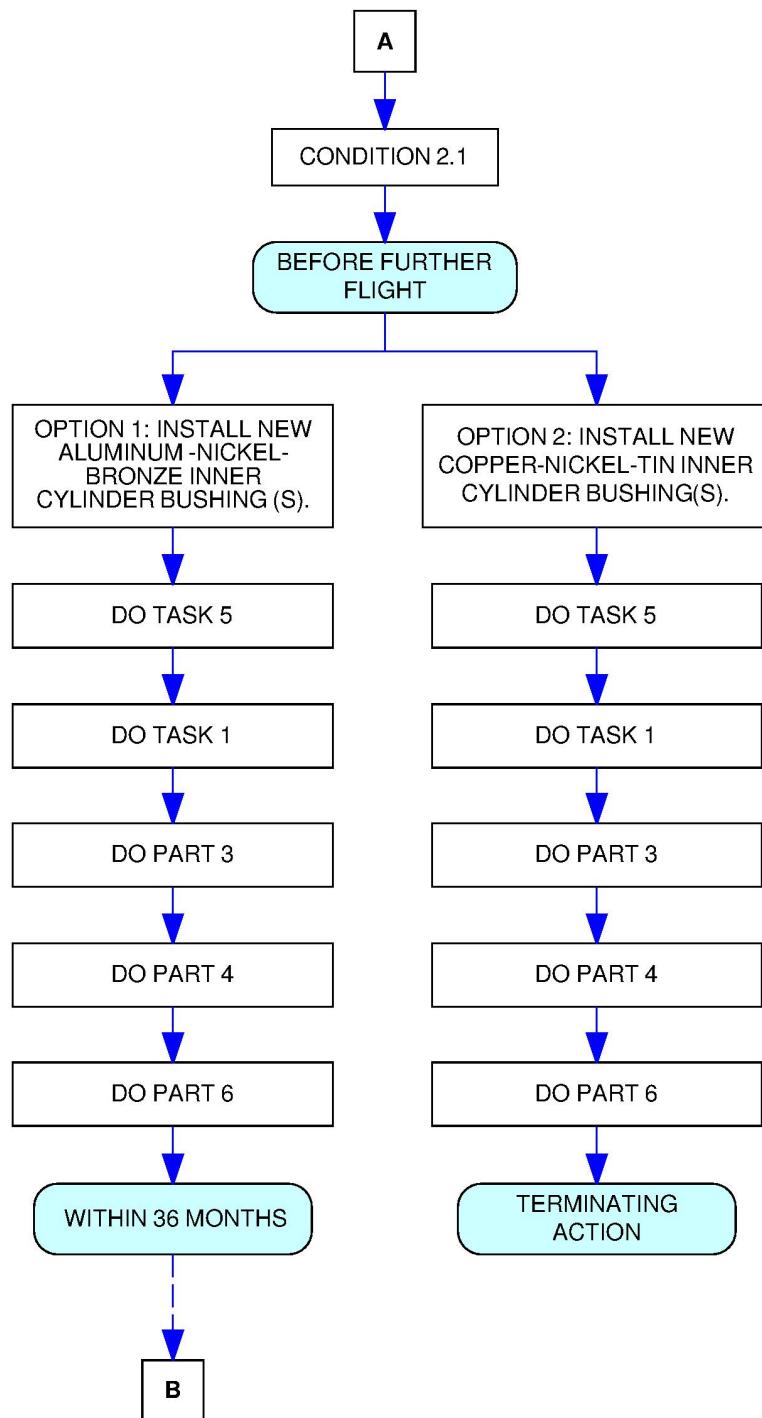
Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-0CA-931D-D

Issue 001, 09 Nov 2020



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ICN-B787-A-000061-A-81205-18120-A-01-1

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-0CA-931D-D

Issue 001, 09 Nov 2020

Figure 2 LOGIC DIAGRAM FOR PARAGRAPH 1.E. COMPLIANCE: TABLE 7: LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Alert Service Bulletin B787-81205-SB320045-00**Appendix D – LOGIC DIAGRAM - LEFT AND RIGHT MLG TRUCK BEAM
AND INNER CYLINDER PIVOT JOINT - PIVOT PIN AND INNER CYLINDER
LUG BORE INSPECTION [Group 1, Configuration 2; Group 2:]**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

Reference	Title
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 5.	Compliance
SB B787-A-32-00-0045-00A-933A-D Issue 001, Step 2.	Work Instructions

Procedure**Group 1, Configuration 2; Group 2:**

- Logic diagrams are provided as an aid only. Information contained in Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 5., Compliance is the primary source for compliance times. Information contained in Data Module SB B787-A-32-00-0045-00A-933A-D, Step 2., Work Instructions is the primary source for tasks required for compliance.
- The table below gives the description for the parts and conditions called out in the logic diagram.

Table 1

Title	Description
ACTION	DO A DETAILED AND FLUORESCENT PENETRANT INSPECTION (FPI) OF BOTH THE LEFT AND RIGHT MLG PIVOT PIN OD SURFACE FOR FRICTION AND HEAT DAMAGE
CONDITION 1	NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE PIVOT PIN OD SURFACE
CONDITION 2	ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE PIVOT PIN OD SURFACE

Applicable To:

Model 787

See Applicability of this data module

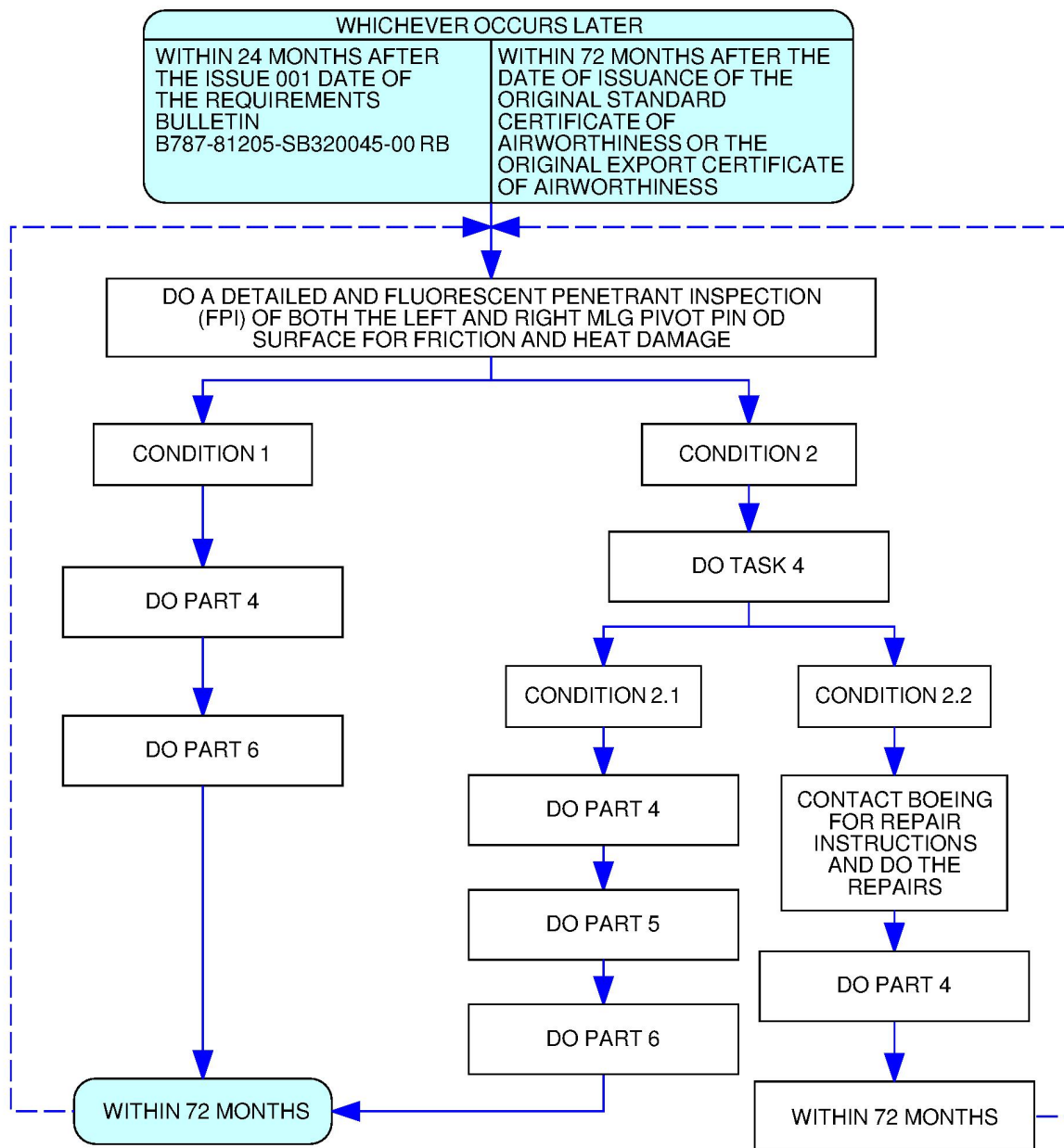
B787-A-32-00-0045-0DA-931D-D**Issue 001, 09 Nov 2020**

Table 1

Title	Description
CONDITION 2.1	NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE
CONDITION 2.2	ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE

Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-0DA-931D-D
Issue 001, 09 Nov 2020



2938219

ICN-B787-A-000061-A-81205-18121-A-01-1

Figure 1 LOGIC DIAGRAM FOR PARAGRAPH 1.E. COMPLIANCE: TABLE 8: LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Applicable To:

Model 787

See Applicability of this data module

End of data module

B787-A-32-00-0045-0DA-931D-D

Issue 001, 09 Nov 2020

Alert Service Bulletin B787-81205-SB320045-00**Appendix E – LOGIC DIAGRAM - LEFT AND RIGHT MLG TRUCK BEAM
AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING AND
INNER CYLINDER LUG BORE INSPECTION [Group 1, Configuration 2;
Group 2:]**

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

References

Reference	Title
SB B787-A-32-00-0045-00A-932A-D Issue 001, Paragraph 5.	Compliance
SB B787-A-32-00-0045-00A-933A-D Issue 001, Step 2.	Work Instructions

Procedure**Group 1, Configuration 2; Group 2:**

- Logic diagrams are provided as an aid only. Information contained in Data Module SB B787-A-32-00-0045-00A-932A-D, Paragraph 5., Compliance is the primary source for compliance times. Information contained in Data Module SB B787-A-32-00-0045-00A-933A-D, Step 2., Work Instructions is the primary source for tasks required for compliance.
- The table below gives the description for the parts and conditions called out in the logic diagram.

Table 1

Title	Description
ACTION	DO A DETAILED INSPECTION OF BOTH THE LEFT AND RIGHT MLG INNER CYLINDER BUSHING INNER DIAMETER (ID) SURFACE FOR EXCESSIVE WEAR, CRACKS AND SMEARING OF BUSHING MATERIAL
CONDITION 1	NO INNER CYLINDER BUSHING ID EXCESSIVE WEAR, NO SURFACE CRACK AND NO SMEARING FOUND
CONDITION 2	ANY INNER CYLINDER BUSHING ID EXCESSIVE WEAR, SURFACE CRACKING OR ANY SMEARING FOUND

Applicable To:
Model 787
See Applicability of this data module

B787-A-32-00-0045-0EA-931D-D
Issue 001, 09 Nov 2020

Table 1

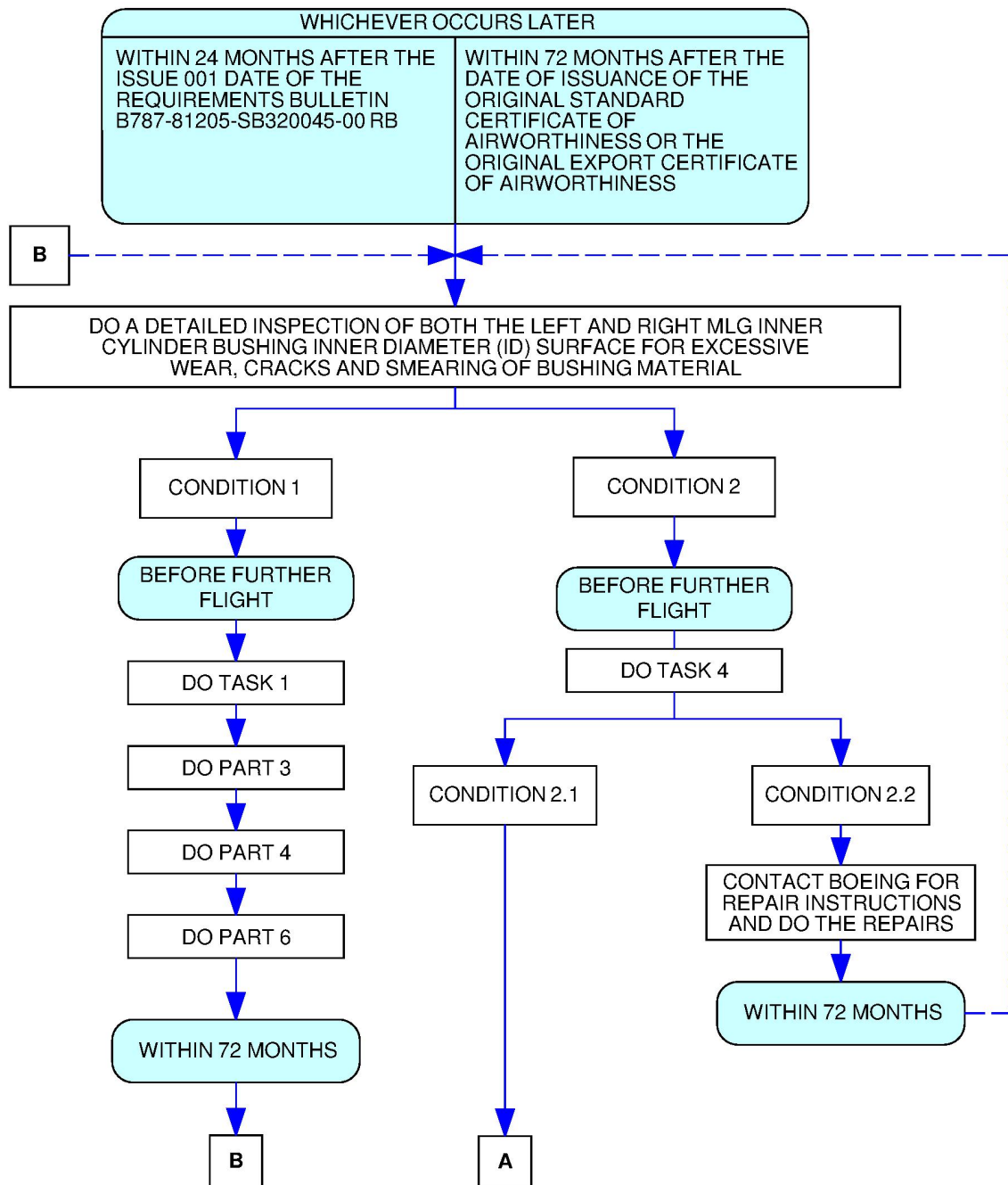
Title	Description
CONDITION 2.1	NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE
CONDITION 2.2	ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-0EA-931D-D**Issue 001, 09 Nov 2020**



2938222

ICN-B787-A-000061-A-81205-18122-A-01-1

Figure 1 LOGIC DIAGRAM FOR PARAGRAPH 1.E. COMPLIANCE: TABLE 9: LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

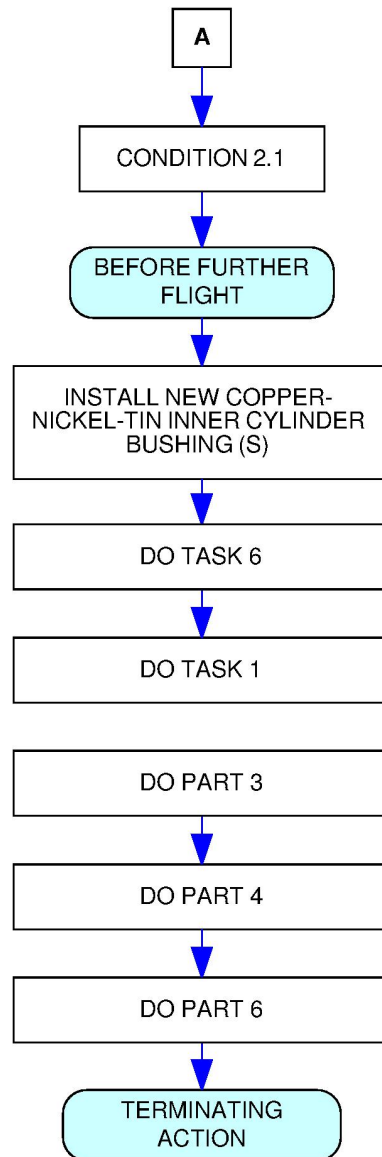
Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-0EA-931D-D

Issue 001, 09 Nov 2020



2938227

ICN-B787-A-000061-A-81205-18123-A-01-1

Figure 2 LOGIC DIAGRAM FOR PARAGRAPH 1.E. COMPLIANCE: TABLE 9: LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Applicable To:
Model 787
See Applicability of this data module

End of data module

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Alert Service Bulletin B787-81205-SB320045-00***Appendix F – PART DEMAND INTENT FORM [Group 1-2:]***

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

Applicable To:

Model 787

See Applicability of this data module

B787-A-32-00-0045-0FA-931D-D**Issue 001, 09 Nov 2020**

Procedure

Group 1-2:

1

Boeing Part Demand Intent

After review of this service bulletin (SB), Boeing asks that the primary engineer fill out this survey to help Boeing predict the quantity and timing of the Boeing supplied kits.

Airline: _____

Contact Name: _____

Date: _____

Contact E-mail: _____

☐ Yes ☐ No Have/will you recommend to your airline to accomplish this SB?

☐ Yes ☐ No Would issuance of an Airworthiness Directive change this decision?

When would you likely be starting this SB incorporation? Month/ Year_____.

How many airplanes per month do you plan to accomplish? Airplane/Month_____.

How many total airplanes do you plan to complete? Total Airplanes_____.

For inspection related SBs, are you planning to replace on condition, or a fleet campaign to replace on all airplanes regardless of condition?

☐ On Condition ☐ Campaign

If you are not incorporating this SB at this time will you please help us understand the reason(s) why? Your input will help us provide better customer support.

☐ Cost Prohibitive ☐ Continue Inspections ☐ Other

Operator Comments: _____

Within 45 days of the SB issue, or as soon after as possible, please scan this form and send to:

KitsandMods@boeing.com

Disclaimer: The data provided in this survey will be used for planning purposes only and does not constitute a commitment on any part of the airlines to purchase the parts in question, nor does it constitute a commitment on the part of Boeing to deliver the parts in question. This survey is a projection to help Boeing forecast demand levels and timing to better support the customers schedule.

2935540

ICN-B787-A-000061-A-81205-18124-A-01-1

Figure 1

Applicable To:

Model 787

See Applicability of this data module

End of data module

B787-A-32-00-0045-0FA-931D-D

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Alert Requirements Bulletin B787-81205-SB320045-00 RB LANDING GEAR - Main Landing Gear - Truck Beam and Inner Cylinder Pivot Joint Inspection and Lubrication

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ECCN: 9E991

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A. EFFECTIVITY

1. Airplanes

This bulletin is applicable to 787-8, 787-9, 787-10 Airplane(s), line number(s) 6-1064 in 2 Group(s). Where the effectivity is presented with hyphens between line numbers, the airplane applicability means "through" and "inclusive", e.g. line numbers 1-9 means line numbers 1 through 9 inclusive.

The Variable Numbers and Group information for the applicable airplanes is given below.

Table 1

GROUP	CONFIGURATION	DESCRIPTION
1	-	787-8 Airplanes delivered with Aluminum-Nickel-Bronze bushings installed.
	1	787-8 Airplanes that have not upgraded to Copper-Nickel-Tin bushings.
	2	787-8 Airplanes that have upgraded to Copper-Nickel-Tin bushings.
2	-	787-9, 787-10 Airplanes delivered with Copper-Nickel-Tin bushings installed.

Airplane Models: 787-10, 787-8, 787-9

Table 2

Variable Number	Group	Variable Number	Group	Variable Number	Group
ZA006	1	ZA230 - ZA256	1	ZA430 - ZA439	1
ZA100 - ZA105	1	ZA260 - ZA277	1	ZA445 - ZA489	1
ZA116 - ZA124	1	ZA285 - ZA296	1	ZA506 - ZA516	1
ZA135 - ZA144	1	ZA317 - ZA324	1	ZA536 - ZA545	1
ZA152 - ZA156	1	ZA327	1	ZA560 - ZA567	1
ZA175 - ZA189	1	ZA334 - ZA335	1	ZA576 - ZA580	1
ZA195 - ZA204	1	ZA341 - ZA342	1	ZA586	1
ZA215 - ZA225	1	ZA380 - ZA389	1	ZA588 - ZA593	1

Variable Number	Group
ZA610 - ZA617	1
ZA650 - ZA652	1
ZA655 - ZA663	1
ZA665 - ZA677	1
ZA680 - ZA685	1
ZA695 - ZA698	1
ZA715 - ZA716	1
ZA718 - ZA719	1
ZA740 - ZA741	1
ZA768 - ZA769	1
ZA778 - ZA779	1
ZA783 - ZA784	1
ZA817 - ZA831	1
ZA839	1
ZA841 - ZA842	1
ZA846 - ZA848	1
ZA853 - ZA863	1
ZA873 - ZA876	1
ZA881 - ZA888	1
ZA916 - ZA920	1
ZA949 - ZA950	1
ZA954 - ZA959	1
ZA963 - ZA966	1
ZA968 - ZA972	1
ZA990	1
ZB001 - ZB012	2
ZB021 - ZB043	2
ZB047 - ZB061	2
ZB077 - ZB081	2
ZB097 - ZB121	2
ZB127 - ZB136	2

Variable Number	Group
ZB167 - ZB191	2
ZB197 - ZB198	2
ZB217	2
ZB219 - ZB220	2
ZB224 - ZB229	2
ZB234 - ZB242	2
ZB246 - ZB248	2
ZB251 - ZB258	2
ZB261 - ZB262	2
ZB265 - ZB282	2
ZB299	2
ZB302 - ZB305	2
ZB332 - ZB338	2
ZB362 - ZB379	2
ZB407 - ZB435	2
ZB446 - ZB467	2
ZB536 - ZB543	2
ZB545 - ZB547	2
ZB558 - ZB586	2
ZB603 - ZB618	2
ZB646 - ZB649	2
ZB656 - ZB665	2
ZB676 - ZB681	2
ZB688 - ZB707	2
ZB733 - ZB735	2
ZB738 - ZB740	2
ZB742 - ZB745	2
ZB749 - ZB751	2
ZB753 - ZB757	2
ZB763 - ZB769	2
ZB771 - ZB775	2

Variable Number	Group
ZB778 - ZB821	2
ZB828 - ZB845	2
ZB858 - ZB863	2
ZB874 - ZB876	2
ZB887	2
ZB890	2
ZB893 - ZB904	2
ZB908 - ZB922	2
ZB924	2
ZB926 - ZB927	2
ZB934 - ZB947	2
ZB967 - ZB971	2
ZB977 - ZB978	2
ZB980 - ZB991	2
ZB993 - ZB997	2
ZC001 - ZC016	2
ZC036 - ZC048	2
ZC061 - ZC070	2
ZC101 - ZC104	2
ZC116 - ZC118	2
ZC126 - ZC129	2
ZC151 - ZC152	2
ZC155 - ZC160	2
ZC211 - ZC217	2
ZC221 - ZC225	2
ZC236	2
ZD001 - ZD009	1
ZD012 - ZD019	1
ZE001 - ZE008	2
ZE013 - ZE014	2
ZE016 - ZE017	2

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Variable Number	Group
ZE031 - ZE032	2
ZE040 - ZE045	2
ZE075	2
ZE085 - ZE086	2
ZE090 - ZE091	2
ZE095 - ZE096	2
ZE100	2
ZE105 - ZE106	2
ZE110	2

Variable Number	Group
ZE115	2
ZE150	2
ZE165 - ZE166	2
ZE170 - ZE171	2
ZE195 - ZE198	2
ZE220 - ZE234	2
ZE270 - ZE272	2
ZE310 - ZE313	2
ZE340 - ZE341	2

Variable Number	Group
ZE350 - ZE362	2
ZE375	2
ZE380 - ZE381	2
ZE415 - ZE418	2
ZE425 - ZE426	2
ZE455 - ZE456	2
ZE481	2
ZE486 - ZE487	2
-	-

2. Spares Affected

Group 1, Configuration 1:

Examine your spares supply for 512Z2001-1, -2, or -3 Inner Cylinder Assemblies. If any of these Inner Cylinder Assemblies are found, remove the Aluminum-Nickel-Bronze Inner Cylinder Bushings 512Z3002-1 and replace with Copper-Nickel-Tin Inner Cylinder Bushings 512Z3002-2. Refer to CMM 32-11-74 as an accepted procedure.

Identify on the part that the change given in this bulletin was done. Use the rubber stamp (Code RO) or ink jet (Code J) method. Refer to SOPM 20-50-10 as an accepted procedure.

Group 1, Configuration 2 and Group 2: None

B. CONCURRENT REQUIREMENTS

None.

C. COMPLIANCE

The Federal Aviation Administration (FAA) will possibly release an Airworthiness Directive related to Requirements Bulletin B787-81205-SB320045-00 RB. The Airworthiness Directive will make the compliance tasks and times given in Requirements Bulletin B787-81205-SB320045-00 RB mandatory.

Accomplish the required actions, based on applicable conditions in Table 5, Table 6, Table 7, Table 8, and Table 9 in accordance with Accomplishment Instructions.

When more than one OPTION is given for a CONDITION, do only one of the OPTION numbers. When more than one ACTION is given for a CONDITION number or an OPTION number, do all of the ACTION numbers for that CONDITION number or OPTION number.

REQUIREMENTS BULLETIN

**Table 5 LEFT AND RIGHT MAIN LANDING GEAR (MLG) TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
- LUBRICATION**

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes	ACTION 1: Lubricate both the left and right Main Landing Gear (MLG) truck beam and inner cylinder pivot joint with MIL-PRF-32014 grease	Within 120 days after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB	Within 120 days after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	50 flight cycles or 25 days whichever occurs later
	ACTION 2: Review maintenance program documentation to verify that it includes lubrication tasks for the left and right MLG Truck Beam and Inner Cylinder Pivot Joint with MIL-PRF-32014 grease at intervals not to exceed 50 flight cycles or 25 days whichever occurs later.	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB	Within 24 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	-
CONDITION 1: MAINTENANCE PROGRAM DOCUMENTATION DOES NOT INCLUDE PIVOT JOINT LUBRICATION WITH MIL-PRF-32014 GREASE AT INTERVALS NOT TO EXCEED 50 FLIGHT CYCLES OR 25 DAYS WHICHEVER OCCURS LATER	Update the maintenance program documentation to incorporate lubrication tasks for the left and right MLG Truck Beam and Inner Cylinder Pivot Joint with MIL-PRF-32014 grease at intervals not to exceed 50 flight cycles or 25 days, whichever occurs later.	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB.	Within 24 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness.	-

REQUIREMENTS BULLETIN

Table 5 LEFT AND RIGHT MAIN LANDING GEAR (MLG) TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - LUBRICATION

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
CONDITION 2: MAINTENANCE PROGRAM DOCUMENTATION INCLUDES PIVOT JOINT LUBRICATION WITH MIL-PRF-32014 GREASE AT INTERVALS NOT TO EXCEED 50 FLIGHT CYCLES OR 25 DAYS WHICHEVER OCCURS LATER.	No further action required.	-	-	-

Group 1, Configuration 1:

Table 6 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes	Do a detailed and Fluorescent Penetrant Inspection (FPI) of both the left and right MLG Pivot Pin OD surface for friction and heat damage.	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB	Within 36 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	-
CONDITION 1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE PIVOT PIN OD SURFACE	Repeat the detailed and Fluorescent Penetrant Inspection (FPI) of the Pivot Pin outer diameter (OD) surface for heat and friction damage	-		36 Months *[1]
CONDITION 2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE PIVOT PIN OD SURFACE	Do a detailed and FPI inspection on the inner cylinder lug bore for heat and friction damage	Before further flight		-

REQUIREMENTS BULLETIN

Group 1, Configuration 1:

Table 6 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install a new Pivot Pin	Before further flight	-
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage.	-	36 Months *[1]
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs	Before further flight	-
	ACTION 1: Install a new Pivot Pin	Before further flight	-
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage.	-	36 Months *[1]

*[1] Installation of defect-free Pivot Pin and concurrent or prior replacement of Aluminum-Nickel-Bronze inner cylinder bushings with Copper-Nickel-Tin inner cylinder bushings and incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease is terminating action to the repeat inspections for that side of the MLG.

Group 1, Configuration 1:

Table 7 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes	Do a detailed inspection of both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB	Within 36 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	-

Group 1, Configuration 1:*Table 7 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION*

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 1: NO INNER CYLINDER BUSHING ID EXCESSIVE WEAR, NO CRACK AND NO SMEARING FOUND	ACTION 1: Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear	Before further flight	-
	ACTION 2: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	-	36 Months *[1]
CONDITION 2: ANY INNER CYLINDER BUSHING ID EXCESSIVE WEAR, CRACK OR ANY SMEARING FOUND	Do a detailed FPI inspection of the inner cylinder lug bore for heat and friction damage	Before further flight	-

REQUIREMENTS BULLETIN

Group 1, Configuration 1:

Table 7 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1 (OPTION 1): Install new Aluminum-Nickel-Bronze Inner Cylinder Bushing(s)	Before further flight	*[1]*[2]
	ACTION 1 (OPTION 2): Install new Copper-Nickel-Tin Inner Cylinder Bushing(s) *[1]*[2]	Before further flight	-
	OPTION 1 and OPTION 2 (ACTION 2): Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear	Before further flight	-
	OPTION 1 AND OPTION 2 (ACTION 3): Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	-	36 Months *[1]
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs.	Before further flight	-
	ACTION 1: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	-	36 Months *[1]

Group 1, Configuration 1:

Table 7 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

*[1] Installation of Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease constitutes terminating action to the repeat inspections for that side of the MLG.

*[2] Installation of Copper-Nickel-Tin bushings is one way interchangeable. Aluminum-Nickel-Bronze inner cylinder bushings can no longer be installed for that side of the MLG.

Group 1, Configuration 2; Group 2:

Table 8 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes	Do a detailed and Fluorescent Penetrant Inspection (FPI) of both the left and right MLG Pivot Pin OD surface for friction and heat damage.	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB	Within 72 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	-
CONDITION 1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE PIVOT PIN OD SURFACE	Repeat the detailed and Fluorescent Penetrant Inspection (FPI) of the Pivot Pin outer diameter (OD) surface for heat and friction damage	-		72 Months *[1]
CONDITION 2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE PIVOT PIN OD SURFACE	Do a detailed and FPI inspection on the inner cylinder lug bore for heat and friction damage.	Before further flight		-
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install a new Pivot Pin	Before further flight		-
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage	-		72 Months *[1]

REQUIREMENTS BULLETIN

Group 1, Configuration 2; Group 2:

Table 8 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs	Before further flight	-
	ACTION 1: Install a new Pivot Pin	Before further flight	-
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage		72 Months *[1]

*[1] Installation of defect-free Pivot Pin and Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease is terminating action to the repeat inspections for that side of the MLG.

Group 1, Configuration 2; Group 2:

Table 9 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes	Do a detailed inspection of both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Within 24 months after the Issue 001 date of the Requirements Bulletin B787-81205-SB320045-00 RB	Within 72 months after the date of issuance of the original standard certificate of airworthiness or the original export certificate of airworthiness	-

Group 1, Configuration 2; Group 2:

Table 9 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 1: NO INNER CYLINDER BUSHING ID EXCESSIVE WEAR, NO CRACK AND NO SMEARING FOUND	ACTION 1: Apply lubrication using MIL-PRF-32014 and make sure lubrication passages are clear.	Before further flight	-
	ACTION 2: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	-	72 Months *[1]
CONDITION 2: ANY INNER CYLINDER BUSHING ID EXCESSIVE WEAR, CRACK OR ANY SMEARING FOUND	Do a detailed and FPI inspection of the inner cylinder lug bore for heat and friction damage.	Before further flight	-
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install new Copper-Nickel-Tin Inner Cylinder Bushing(s)	Before further flight	-
	ACTION 2: apply lubrication using MIL-PRF-32014 and make sure lubrication passages are clear.	Before further flight	-
	ACTION 3: Repeat the detailed inspections for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	-	72 Months *[1]

REQUIREMENTS BULLETIN**Group 1, Configuration 2; Group 2:****Table 9 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION**

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs	Before further flight	-
	ACTION 1: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	-	72 Months *[1]

*[1] Installation of Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease constitutes terminating action to the repeat inspections for that side of the MLG.

D. APPROVAL

This Requirements Bulletin was examined by the Federal Aviation Administration (FAA). The changes specified in this document comply with the applicable regulations and are FAA approved, as well as European Union Aviation Safety Agency (EASA)/Joint Aviation Authorities (JAA) approved for all EASA/JAA approved airplanes listed in this Requirements Bulletin effectivity. This document and its approval were based on the airplane in its original Boeing delivery configuration or as modified by other approved Boeing changes.

If an airplane has a non-Boeing modification or repair that affects a component or system also affected by this Requirements Bulletin, the operator is responsible for obtaining appropriate regulatory agency approval before incorporating this Requirements Bulletin.

E. ACCOMPLISHMENT INSTRUCTIONS

1. GENERAL INFORMATION

- NOTE:
1. This is an Enhanced Required for Compliance document. There will be a separate Service Bulletin (SB) and a separate Requirements Bulletin (RB). If an RB is mandated by an Airworthiness Directive (AD), then all applicable requirements specified in the RB must be done. For the related SB, some locations are marked RC Start and RC End to identify the requirements that are restated from the RB. For the related SB, the areas between RC Start and RC End, including sub-steps and any figures identified between RC Start and RC End, must be done to comply with the AD. Therefore, an Alternative Method of Compliance (AMOC) is required for any deviations to steps between RC Start and RC End, including substeps and identified figures. For the related SB, the steps not between RC Start and RC End may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC; this is provided that the steps between RC Start and RC End, including sub-steps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition. Figures not required for compliance are omitted from the RB.
 2. This is an Enhanced Required for Compliance document. The Boeing processes used to create the Service Bulletin (SB) and the Requirements Bulletin (RB) ensure that the information between "RC Start" and "RC End" in the SB are identical to the information in the same sections (Compliance, Work Instructions...) of the RB which the SB refers to as the related document.
 3. These work instructions refer to procedures included in other Boeing documents. When the words "refer to" are used and the operator has an accepted alternative procedure, the accepted alternative procedure can be used. When the words "in accordance with" are included in the instruction, the procedure in the Boeing document must be used.
 4. The compliance times for the actions in Work Instructions are in the Compliance section.
 5. When more than one OPTION is given for a CONDITION, do only one of the OPTION numbers. When more than one ACTION is given for a CONDITION number or an OPTION number, do all of the ACTION numbers for that CONDITION number or OPTION number.
 6. The instructions in Work Instructions and the Tasks can include operation of tools or test equipment. Boeing Engineering Tool Drawings, the Illustrated Tool and Equipment Manual, and the Special Tool and Ground Handling Drawing Index contain data on versions of the tools or test equipment that you can use. It is permitted to use replaced tools. It is not permitted to use superseded tools.
 7. A Detailed Inspection is defined as: An intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. This could include tactile assessment in which a component or assembly can be checked for tightness/security. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors and magnifying lenses may be necessary. Surface cleaning and elaborate access procedures may be required.

8. Heat damage is defined as ladder cracks, spalling, pull-outs, cracks, chips, flakes, lifting, or color changes.
9. Friction damage is defined as material transfer on the part surface or other contaminants found.
12. Unless shown differently, these dimensions and tolerances are used:
 - Linear dimensions are in inches
 - Tolerance on linear dimensions, other than rivet and bolt edge margins, is plus or minus 0.03 inch
 - Tolerance on rivet and bolt edge margin is plus or minus 0.05 inch
 - Angular tolerance is plus or minus 2 degrees
 - Hole dimensions for standard solid rivets and fasteners are in SRM Chapter 51
 - Torque Values:
 - Values for structural fasteners are given in 787 Structural Repair Manual, Chapter 51.
 - Values for airframe maintenance tasks are included in Chapter 20 of 787 Aircraft Maintenance Manual (AMM).
 - Values for electrical maintenance tasks are included in Chapter 20 of Standard Wiring Practices Manual (SWPM).
 - Values for engine maintenance tasks are included in Chapter 70 of 787 Aircraft Maintenance Manual (AMM).
 - Non-standard torque values for maintenance tasks are included in the applicable installation step.
13. If it is necessary to remove more parts for access, you can remove those parts. If you can get access without removing identified parts, it is not necessary to remove all of the identified parts. Jacking and shoring limitations must be observed.
14. Where the work instructions include installation of a kept part, a new or serviceable part with the same part number can be installed as an alternative to the kept part.

2. WORK INSTRUCTIONS

A. Actions Required for Compliance

(1) Requirements

REQUIREMENTS BULLETIN

*Table 1 LEFT AND RIGHT MAIN LANDING GEAR (MLG) TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
- LUBRICATION*

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
All Airplanes	Lubricate both the left and right Main Landing Gear (MLG) truck beam and inner cylinder pivot joint with MIL-PRF-32014 grease.	-	Task 1
	Review maintenance program documentation to verify that it includes lubrication tasks for the left and right MLG Truck Beam and Inner Cylinder Pivot Joint with MIL-PRF-32014 grease at intervals not to exceed 50 flight cycles or 25 days whichever comes later.	-	-
CONDITION 1: MAINTENANCE PROGRAM DOCUMENTATION DOES NOT INCLUDE PIVOT JOINT LUBRICATION WITH MIL-PRF-32014 GREASE AT INTERVALS NOT TO EXCEED 50 FLIGHT CYCLES OR 25 DAYS WHICHEVER OCCURS LATER.	Update the maintenance program documentation to incorporate lubrication tasks for the left and right MLG Truck Beam and Inner Cylinder Pivot Joint with MIL-PRF-32014 grease at intervals not to exceed 50 flight cycles or 25 days, whichever occurs later.	-	-
CONDITION 2: MAINTENANCE PROGRAM DOCUMENTATION INCLUDES PIVOT JOINT LUBRICATION WITH MIL-PRF-32014 GREASE AT INTERVALS NOT TO EXCEED 50 FLIGHT CYCLES OR 25 DAYS WHICHEVER OCCURS LATER.	No further action required.	-	-

REQUIREMENTS BULLETIN

Group 1, Configuration 1:

Table 2 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
All Airplanes	-	-	PART 1: GET ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	-	-	PART 2: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN REMOVAL
	Do a detailed and Fluorescent Penetrant Inspection (FPI) of both the left and right MLG Pivot Pin OD surface for friction and heat damage.	Task 2	-
CONDITION 1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE PIVOT PIN OD SURFACE	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	Repeat the detailed and Fluorescent Penetrant Inspection(FPI) of the Pivot Pin outer diameter (OD)surface for heat and friction damage	Task 2	*[1]
CONDITION 2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE PIVOT PIN OD SURFACE	Do a detailed and FPI inspection on the inner cylinder lug bore for heat and friction damage	Task 4	-

REQUIREMENTS BULLETIN

Group 1, Configuration 1:

Table 2 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install a new Pivot Pin	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 5: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT- INNER CYLINDER BUSHING INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage	Task 2	*[1]
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs.	-	-
	ACTION 1: Install a new Pivot Pin	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage	Task 2	*[1]

REQUIREMENTS BULLETIN**Group 1, Configuration 1:****Table 2 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION**

*[1] Installation of defect-free Pivot Pin and concurrent or prior replacement of Aluminum-Nickel-Bronze inner cylinder bushings with Copper-Nickel-Tin inner cylinder bushings and incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease is terminating action to the repeat inspections for that side of the MLG.

Group 1, Configuration 1:**Table 3 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION**

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
All Airplanes	-	-	PART 1: GET ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	-	-	PART 2: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN REMOVAL
	Do a detailed inspection of both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Task 3	-

REQUIREMENTS BULLETIN

Group 1, Configuration 1:

Table 3 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 1: NO INNER CYLINDER BUSHING ID EXCESSIVE WEAR, NO CRACK AND NO SMEARING FOUND	ACTION 1: Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear	-	Task 1
	-	-	PART 3: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECT INNER CYLINDER BUSHING LUBE PASSAGE
	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	ACTION 2: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Task 3	*[1]
CONDITION 2: ANY INNER CYLINDER BUSHING ID EXCESSIVE WEAR, CRACK OR ANY SMEARING FOUND	Do a detailed and FPI inspection of the inner cylinder lug bore for heat and friction damage	Task 4	-

REQUIREMENTS BULLETIN

Group 1, Configuration 1:

Table 3 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1 (OPTION 1): Install new Aluminum-Nickel-Bronze Inner Cylinder Bushing(s) ACTION 1 (OPTION 2): Install new Copper-Nickel-Tin Inner Cylinder Bushing(s). *[1]*[2]	-	Task 5
	OPTION 1 and OPTION 2 (ACTION 2): Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear	-	Task 1
	-	-	PART 3: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECT INNER CYLINDER BUSHING LUBE PASSAGE
	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
		Task 3	*[1]

Group 1, Configuration 1:

Table 3 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
	OPTION 1 and OPTION 2 (ACTION 3): Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material		
CONDITION 2.2: ANY HEAT DAMAGE OR FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs.	-	-
	ACTION 1: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	Task 3	*[1]

*[1] Installation of Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease constitutes terminating action to the repeat inspections for that side of the MLG.

*[2] Installation of Copper-Nickel-Tin bushings is one way interchangeable. Aluminum-Nickel-Bronze inner cylinder bushings can no longer be installed for that side of the MLG.

REQUIREMENTS BULLETIN

Group 1, Configuration 2; Group 2:

Table 4 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
All Airplanes	-	-	PART 1: GET ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	-	-	PART 2: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN REMOVAL
	Do a detailed and Fluorescent Penetrant Inspection (FPI) of both the left and right MLG Pivot Pin OD surface for friction and heat damage.	Task 2	-
CONDITION 1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE PIVOT PIN OD SURFACE	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	Repeat the detailed and Fluorescent Penetrant Inspection(FPI) of the Pivot Pin outer diameter(OD) surface for heat and friction damage	Task 2	*[1]
CONDITION 2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE PIVOT PIN OD SURFACE	Do a detailed and FPI inspection on the inner cylinder lug bore for heat and friction damage.	Task 4	-

REQUIREMENTS BULLETIN

Group 1, Configuration 2; Group 2:

Table 4 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install a new Pivot Pin	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 5: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT- INNER CYLINDER BUSHING INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage	Task 2	*[1]
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE IS FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs.	-	-
	ACTION 1: Install a new Pivot Pin	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	ACTION 2: Repeat the detailed and FPI inspections for both the left and right MLG pivot pin OD surface for friction and heat damage	Task 2	*[1]

REQUIREMENTS BULLETIN**Group 1, Configuration 2; Group 2:****Table 4 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION**

*[1] Installation of defect-free Pivot Pin and Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease is terminating action to the repeat inspections for that side of the MLG.

Group 1, Configuration 2; Group 2:**Table 5 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION**

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
All Airplanes	-	-	PART 1: GET ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	-	-	PART 2: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN REMOVAL
	Do a detailed inspection of both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Task 3	-

REQUIREMENTS BULLETIN

Group 1, Configuration 2; Group 2:

Table 5 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 1: NO INNER CYLINDER BUSHING ID EXCESSIVE WEAR, NO CRACK AND NO SMEARING FOUND	ACTION 1: Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear.	-	Task 1
	-	-	PART 3: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECT INNER CYLINDER BUSHING LUBE PASSAGE
	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	ACTION 2: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material	Task 3	*[1]
CONDITION 2: ANY INNER CYLINDER BUSHING ID EXCESSIVE WEAR, CRACK OR ANY SMEARING FOUND	Do a detailed and FPI inspection of the inner cylinder lug bore for heat and friction damage.	Task 4	-

REQUIREMENTS BULLETIN

Group 1, Configuration 2; Group 2:

Table 5 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 2.1: NO HEAT DAMAGE AND NO FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	ACTION 1: Install new Copper-Nickel-Tin Inner Cylinder Bushing(s).	-	Task 6
	ACTION 2: Apply lubrication using MIL-PRF-32014 grease and make sure lubrication passages are clear.	-	Task 1
	-	-	PART 3: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INSPECT INNER CYLINDER BUSHING LUBE PASSAGE
	-	-	PART 4: MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSTALLATION
	-	-	PART 6: RESTORE ACCESS TO THE MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT
	ACTION 3: Repeat the detailed inspections for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	Task 3	*[1]

Group 1, Configuration 2; Group 2:

Table 5 LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB320045-00 Issue 001 or later approved issues as an accepted procedure.
CONDITION 2.2: ANY HEAT DAMAGE OR ANY FRICTION DAMAGE FOUND ON THE INNER CYLINDER LUG BORE	Contact Boeing for repair instructions and do the repairs.	-	-
	ACTION 1: Repeat the detailed inspection for both the left and right MLG inner cylinder bushing ID surface for excessive wear, cracks and smearing of bushing material	Task 3	*[1]

*[1] Installation of Copper-Nickel-Tin inner cylinder bushings and concurrent or prior incorporation of the increased lubrication interval (not to exceed the time specified in Compliance Section, Table 5) with MIL-PRF-32014 grease constitutes terminating action to the repeat inspections for that side of the MLG.

Task 2 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION [Group 1-2:]

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

Procedure

This Task applies only to: Group 1-2.

LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - PIVOT PIN INSPECTION

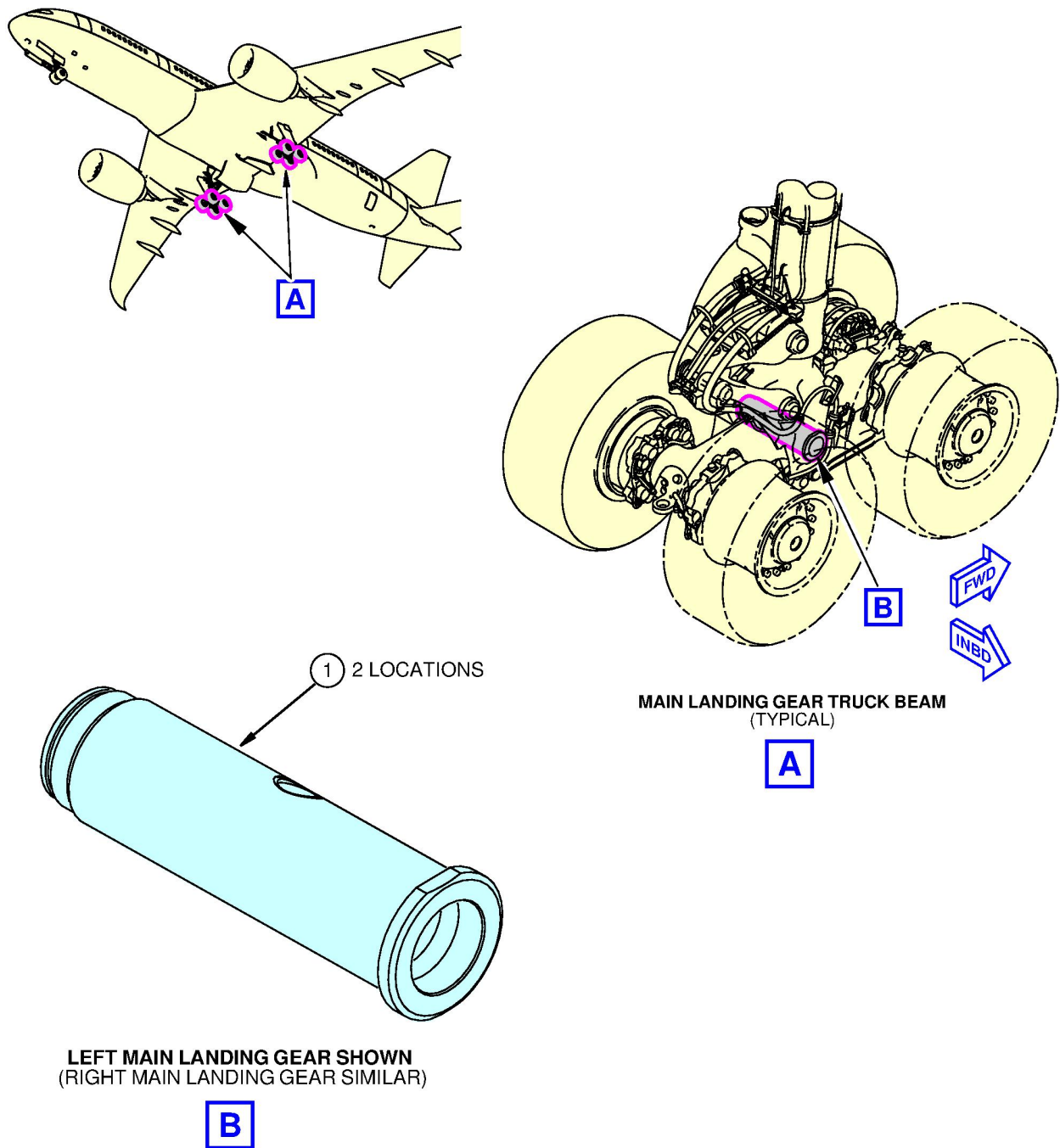


Figure 1

1. The step numbers shown below agree with the numbers shown in the circle symbols in the Task. The QTY numbers shown below are the number of parts necessary for this task.



REQUIREMENTS BULLETIN

Table 1

Step	Action	Name	Identification	Qty	More Data
1	Inspect	PIVOT PIN COMPO- NENT ASSEMBLY	515Z2003-()	2	*[1]

*[1] Do a detailed and Fluorescent Penetrant Inspection of the Pivot Pin OD surface for heat and friction damage. Refer to SOPM 20-20-02 as an accepted procedure.

Task 3 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION [Group 1-2:]

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

Procedure

This Task applies only to: Group 1-2.

LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION

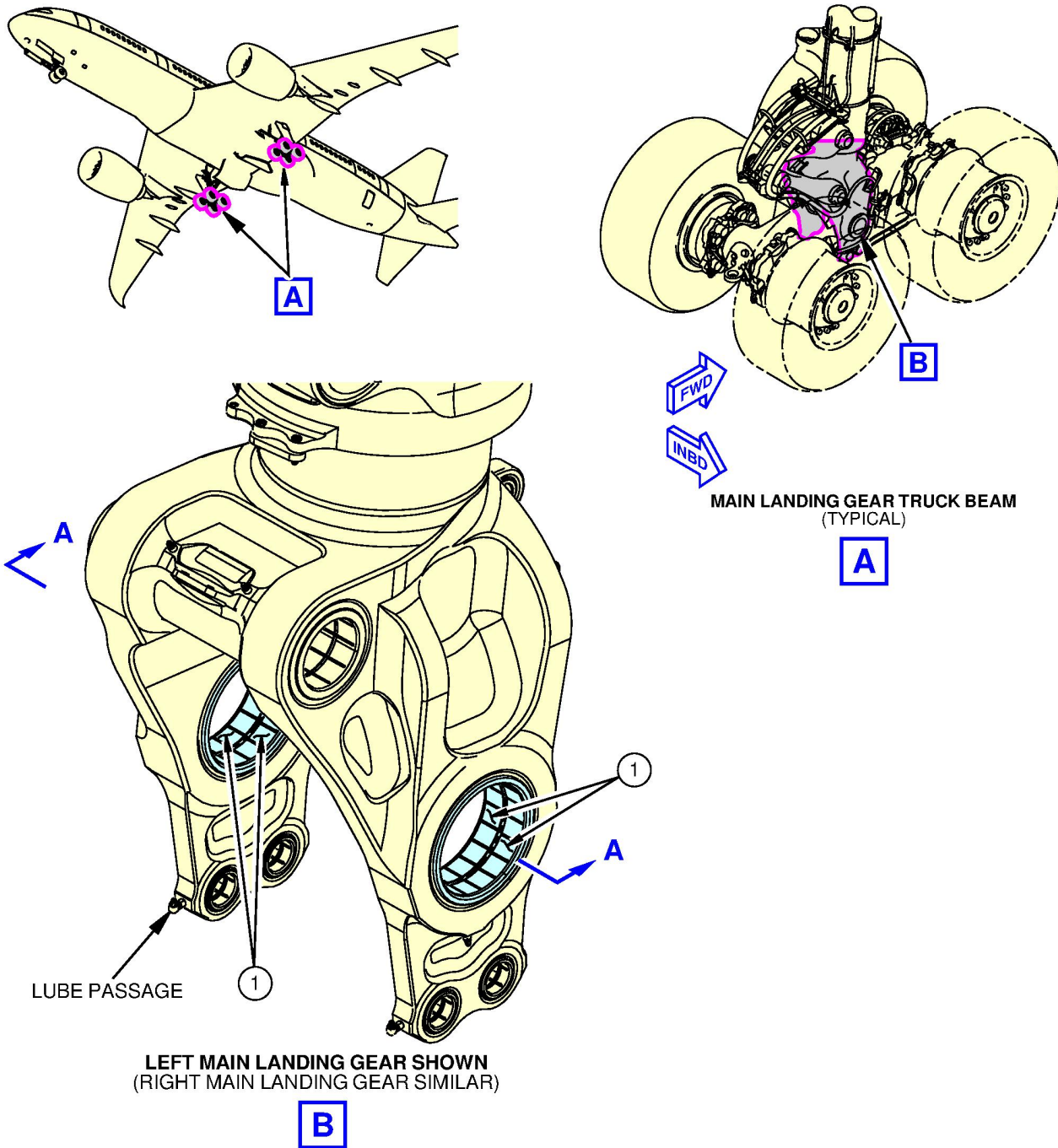
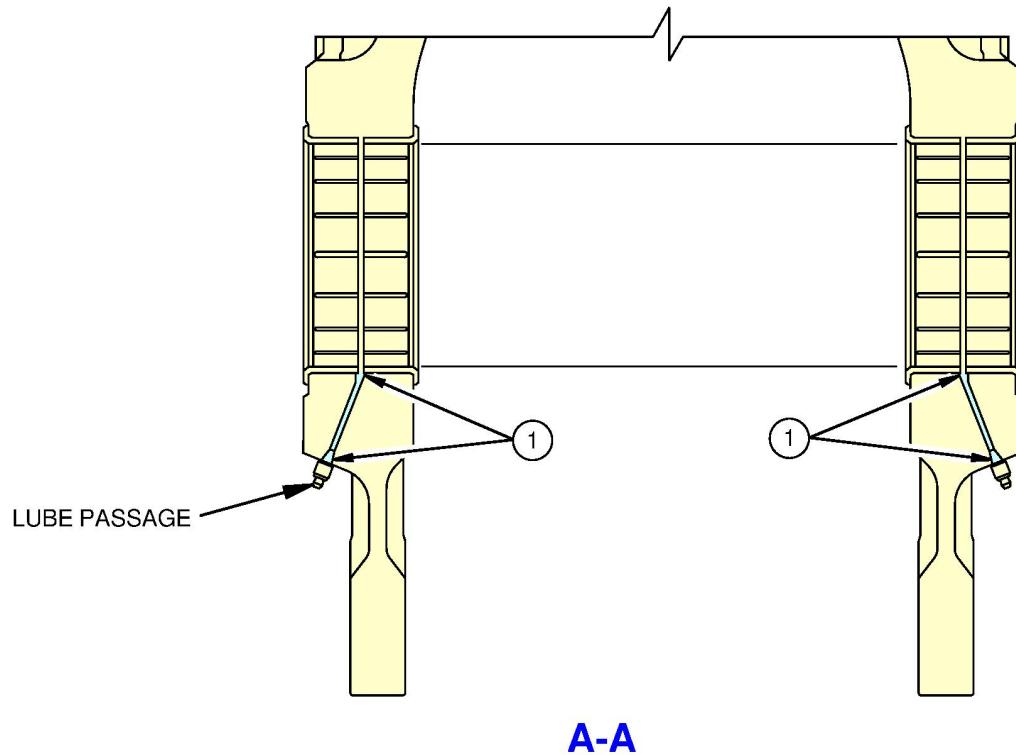


Figure 1

LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER BUSHING INSPECTION



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Figure 2

1. The step numbers shown below agree with the numbers shown in the circle symbols in the Task. The QTY numbers shown below are the number of parts necessary for this task.

Table 1

Step	Action	Name	Identification	Qty	More Data
1	Inspect	BUSH - INNER CYLIN- DER TO BOGIE	512Z3002-()	8	*[1]

*[1] Do a detailed inspection of both the left and right MLG inner cylinder bushing inner diameter (ID) surface for excessive wear, cracks and smearing of bushing material. MLG inner cylinder bushing inner diameter (ID) design dimensional limits can be found in 787-8 CMM 32-11-79 or 787-9 CMM 32-12-20 or 787-10 CMM 32-10-36 'FITS AND CLEARANCES'.

Task 4 – LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER LUG BORE INSPECTION [Group 1-2:]

Alert: THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER. THIS IS AN ENHANCED REQUIRED FOR COMPLIANCE DOCUMENT. THE BOEING PROCESSES USED TO CREATE THE SERVICE BULLETIN (SB) AND THE REQUIREMENTS BULLETIN (RB) ENSURE THAT THE INFORMATION BETWEEN "RC START" AND "RC END" IN THE SB ARE IDENTICAL TO THE INFORMATION IN THE SAME SECTIONS (COMPLIANCE, WORK INSTRUCTIONS...) OF THE RB WHICH THE SB REFERS TO AS THE RELATED DOCUMENT.

Procedure

This Task applies only to: Group 1-2.

LEFT AND RIGHT MLG TRUCK BEAM AND INNER CYLINDER PIVOT JOINT - INNER CYLINDER LUG BORE INSPECTION

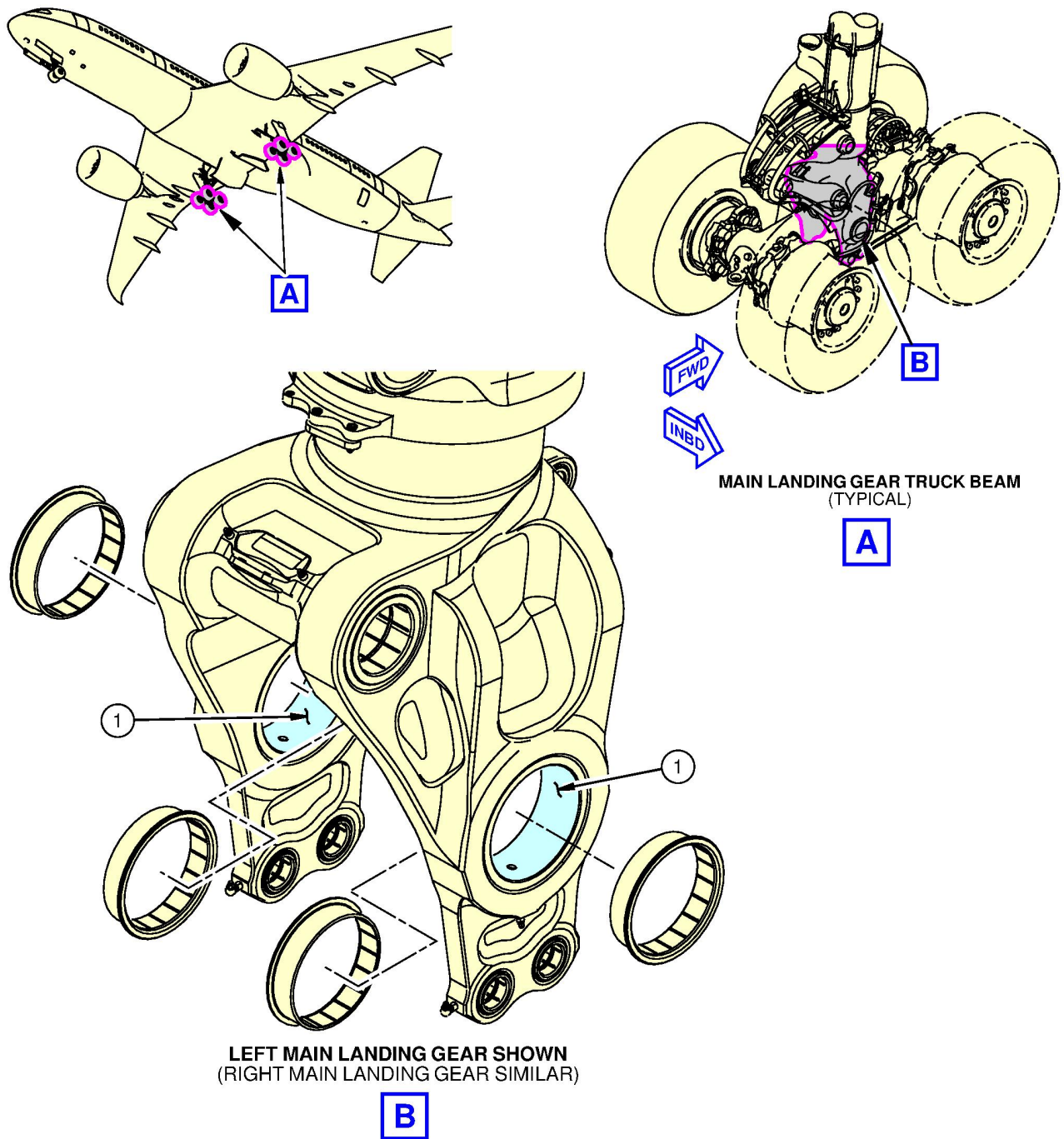


Figure 1

1. The step numbers shown below agree with the numbers shown in the circle symbols in the Task. The QTY numbers shown below are the number of parts necessary for this task.



REQUIREMENTS BULLETIN

Table 1

Step	Action	Name	Identification	Qty	More Data
1	Inspect	INNER CYLINDER	512Z3001-()	-	*[1]

*[1] Do a detailed and FPI inspection of the inner cylinder lug bore inner diameter coating, chamfer, and face surfaces for heat and friction damage. Refer to SOPM 20-20-02 as an accepted procedure.